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Charles F Morton

THE CULTIVATOR,

Mili Farm Mortonville Orange Co
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AND TO

DOMESTIC AND RURAL ECONOMY.

ILLUSTRATED WITH ENGRAVINGS OF

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CATTLE, HORSES, SHEEP, SWINE AND POULTRY,
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FOR

THE UNITED STATES,

FOR THE YEAR

1852.

CALCULATED FOR

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AND

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ECLIPSES IN THE YEAR 1852.

THERE will be six Eclipses, three of the Sun, and three of the Moon, this year.

I. January 6th and 7th, Moon eclipsed; visible and total.

Cities in the order of Longitude.	Beginning.	Middle.	End of the Eclipse.
	D. H. M.	D. H. M.	D. H. M.
Eastport	6 11 53 ev.	7 1 42 mo.	7 3 31 mo.
Boston	6 11 37 ev.	7 1 26 mo.	7 3 15 mo.
New York	6 11 25 ev.	7 1 14 mo.	7 3 3 mo.
Philadelphia	6 11 20 ev.	7 1 9 mo.	7 2 58 mo.
Baltimore	6 11 14 ev.	7 1 3 mo.	7 2 52 mo.
Washington	6 11 13 ev.	7 1 2 mo.	7 2 51 mo.
Richmond	6 11 11 ev.	7 1 0 mo.	7 2 49 mo.
Raleigh	6 11 6 ev.	7 0 55 mo.	7 2 44 mo.
Charleston	6 11 1 ev.	7 0 50 mo.	7 2 39 mo.
St. Augustine	6 10 55 ev.	7 0 44 mo.	7 2 33 mo.
Milledgeville	6 10 48 ev.	7 0 37 mo	7 2 26 mo.
Lexington	6 10 44 ev	7 0 33 mo.	7 2 22 mo.
Cincinnati	6 10 43 ev.	7 0 32 mo.	7 2 21 mo.
Nashville	6 10 34 ev.	7 0 23 mo.	7 2 12 mo.
Mobile	6 10 28 ev.	7 0 17 mo.	7 2 6 mo.
St. Louis	6 10 23 ev	7 0 12 mo.	7 2 1 mo.
New Orleans	6 10 21 ev.	7 0 10 mo.	7 1 59 mo.
Austin	6 9 50 ev.	6 11 39 ev.	7 1 28 mo.
San Francisco	6 8 13 ev.	6 10 2 ev	6 11 51 ev.
Astoria	6 8 7 ev.	6 9 56 ev.	6 11 45 ev.

Depth of immersion in the earth's shadow, 20 digits from the southern side.

II. January 21, Sun eclipsed at the time of New Moon in the morning (20th in the evening, west of the Rocky Mountains); invisible. Visible about the South Pole of the earth.

III. June 17, Sun eclipsed at the time of New Moon in the morning (evening in the eastern part of New England); invisible. Visible in the southern part of South America.

IV. July 1, Moon eclipsed at the time of Full Moon in the morning; invisible.

V. December 10, Sun eclipsed at the time of New Moon in the evening; invisible. It will be visible throughout the greater part of Asia, and will be central and total on the meridian in longitude 127° 18′ east from Greenwich, and latitude 37° 28′ north.

VI. December 26, Sabbath morning, Moon eclipsed on the southern limb; visible and partly visible in the United States.

Cities.	Be gining	Moon Sets	Cities.	Be-gining	Moon Sets
	H. M.	H. M.		H. M	H. M.
Eastport	7 5	7 33	Lexington	5 56	7 17
Boston	6 49	7 29½	Cincinnati	5 55	7 20
New York	6 37	7 24	Indianopolis	5 49	7 23
Philadelphia	6 32	7 22	Nashville	5 46	7 12
Baltimore	6 26	7 20	Mobile	5 40	6 58
Washington	6 25	7 19	St. Louis	5 35	7 20
Richmond	6 23	7 15	New Orleans	5 33	6 56
Raleigh	6 18	7 10	Austin	5 2	6 58
Charleston	6 13	7 2			End.
St. Augustine	6 7	6 54	SanFrancisco	3 25	6 24
Milledgeville	6 0	7 3	Astoria	3 19	6 18

Magnitude at the middle of the eclipse, 8.12 digits.

◆

PHENOMENA OF THE PLANETS FOR 1852.

JAN. 2, ☉ in perigee; 6th, inf. ☌ ☉ ☿; 9, ♅ stat.; 17, ☿ stat.; 18, □ ☉ ♄; 20, ☉ ent. ♒; 21, □ ☉ ♅; 24, ☍ ☉ ♂; 29, ☿'s gr. elong. FEB. 11, □ ☉ ♃; 19, ☉ ent. ♓. MAR. 4, ♂ stat.; 9, ♃ stat; 15, sup. ☌ ☉ ☿; 20, ☉ enters ♈. APRIL 9, ☿'s gr. elong.; 19, ☉ enters ♉; ☿ stat.; 24, ☌ ☉ ♅; 27, ☌ ☉ ♄; 28, □ ☉ ♂; 29, inf. ☌ ☉ ♀. MAY 8, ☍ ☉ ♃; 11, ☿'s gr. elong.; 12, ☿ stat.; 20, ☉ enters □; 27, ☿'s gr. elong. JUNE 21, ☉ enters ♋; 28, ☿ stat.; sup. ☌ ☉ ☿. JULY 2, ☉ in apogee; 10, ♃ stat.; 21, inf. ☌ ☉ ☿; 22, ☉ enters ♌; 31, □ ☉ ♅. AUG. 6, □ ☉ ♃; 7, ☿'s gr. elong.; 9, □ ☉ ♄; 11, ♀ stat.; 13, ♅ stat.; 21, ☿ stat.; 22, ☉ ent. ♍; 30, ♄ stat. SEPT. 4, inf. ☌ ☉ ☿; 12, ☿ stat.; 20, ☿'s gr. elong.; 22, ☉ enters ♎; 30, ☿'s gr. elong. OCT. 18, sup. ☌ ☉ ☿; 23, ☉ enters ♏; 29, ☍ ☉ ♅. NOV. 6, ☍ ☉ ♄; 21, ☉ enters ♐; 25, ☌ ☉ ♃. DEC. 2, ☿'s gr. elong.; 10, ☿ stat.; 20, inf. ☌ ☉ ☿; 21, ☉ enters ♑; 30, ☉ in perigee; ☿ stat.

RISING AND SETTING OF PLANETS, &c.

THESE are not materially affected by the *longitude* of a place. When the hour is less than 6, it is in the morning; when greater than 6, it is in the evening.

Date.	Planet.	Boston	Washington.	Charleston.
1852.		H. M.	H. M.	H. M.
Jan 12	Venus sets	6 53	7 0	7 12
" 23	"	7 21	7 26	7 35
" 27	Jupiter rises	1 52	1 45	1 33
Feb. 5	Venus sets	7 54	7 56	8 0
" 17	"	8 23	8 22	8 22
Mar. 10	"	9 15	9 10	9 2
" 23	Mars sets	3 32	3 20	3 2
" 27	Venus sets	9 54	9 46	9 32
April 1	"	10 6	9 56	9 41
" 13	"	10 31	10 19	10 1
" 22	"	10 47	10 34	10 14
May 4	Mars sets	1 25	1 16	1 1
" 14	"	0 57	0 49	0 36
" 28	Venus sets	10 51	10 40	10 21
June 2	Jupiter sets	3 14	3 21	3 31
" 5	Venus sets	10 37	10 26	10 9
" 30	"	9 8	9 0	8 47
July 6	Mars sets	10 31	10 28	10 23
" 13	"	10 12	10 10	10 6
Aug. 4	Venus rises	3 38	3 44	3 54
" 17	"	2 41	2 48	2 59
" 19	Seven Stars rise	10 6	10 18	10 35
Sept. 1	"	9 15	9 27	9 44
" 11	"	8 36	8 47	9 5
" 25	Venus rises	1 59	2 6	2 16
Oct. 2	"	2 5	2 10	2 19
" 14	"	2 19	2 23	2 30
" 25	"	2 36	2 39	2 43
Nov. 8	"	3 1	3 2	3 2
" 19	"	3 24	3 22	3 19
" 26	"	3 39	3 35	3 31
Dec. 4	Sirius rises	8 42	8 35	8 24
" 15	Venus rises	4 22	4 15	4 5
" 31	Saturn sets	2 50	2 44	2 35

NOTES TO THE READER.

THE Calendar page in this Almanac is adapted for use in every part of the United States. It is based on the fact, that in the same *Latitude, that is, on a line running due east and west, the Sun and Moon rise and set at the same moment by the clock or almanac*, not only throughout the United States, but around the world—the variations being so small as to be of no importance for ordinary purposes. Thus, if on any day the Sun rises at Boston at 5 minutes past 6, it rises at 5 minutes past 6 on the same line of latitude westward throughout the states of Massachusetts, New York, Michigan, Iowa, and the territory of Oregon.

Hence, a Calendar adapted to Boston for New England, is equally adapted, as to the rising and Setting of the Sun and Moon, for use in Northern New York and Michigan; a Calendar for New York city is adapted for use in the states of Pennsylvania, Ohio, Indiana, and Illinois; a Calendar for Baltimore is adapted for Virginia, Kentucky, and Missouri; and a Calendar for Charleston will answer for North Carolina, Tennessee, Georgia, Alabama, and Louisiana. Wherever the reader is, look for the state at the top of the Calendar page, and underneath are the rising and setting of the Sun and Moon, sufficiently accurate for all practical purposes.

The *changes, fulls, and quarters of the Moon*, however, are governed by another principle, and are essentially the same for all places on the same *Longitude;* that is, on any line extending due north and south. Thus the Moon's phases for Charleston, suit Pittsburgh, etc. Any phasis takes place at the same instant of absolute time; but the local time is earlier at the westward, and later at the eastward, at the rate of *four minutes for each degree of Longitude;* or at the rate of *one minute* for every 12 miles 273 rods in the latitude of Boston; 13 miles 60 rods in the latitude of New York city; 13 miles 143 rods in the latitude of Baltimore; and 14 miles 199 rods in the latitude of Charleston.

ASPECTS AND NODES.

☌ Conjunction; ✱ Sextile, 60 degrees; □ Quartile, 90 degrees; △ Trine, 120 degrees; Vc. Quincunx, 150 degrees; ☍ Opposition, 180 degrees; ☊ Ascending Node, ☋ Descending Node.

EQUINOXES AND SOLSTICES FOR 1852.

EQUINOXES AND SOLSTICES.	LONDON.	BOSTON.	WASHINGTON.	CINCINNATI.	SAN FRANCISCO.
	D. H. M.	D. H. M.	D. H. M.	D. H. M.	D. H. M.
Vernal Equinox ... March......	20 10 42 mo.	20 5 58 mo.	20 5 34 mo.	20 5 4 mo.	20 2 34 mo.
Summer Solstice... June.......	21 7 29 mo.	21 2 45 mo.	21 2 21 mo.	21 1 51 mo.	20 11 21 ev.
Autumnal Equinox. September .	22 9 41 ev.	22 4 57 ev.	22 4 33 ev.	22 4 3 ev.	22 1 33 ev.
Winter Solstice .... December ..	21 3 13 ev.	21 10 29 mo.	21 10 5 mo.	21 9 35 mo.	21 7 5 mo.

When it is noon in London, it is 6h. 52m. in the morning at Washington; and when it is noon at Washington, it is 5h. 8m. in the evening at London.

TABLE OF THE SOLAR SYSTEM.

Names	Mean diameter in Eng. miles.	Mean distance from the Sun.	Time of revolution round the Sun.	Light and heat, earth being 1.
The Sun..	883,246	....	D. H. M. S.	....
Mercury .	3,224	37,000,000	87 23 15 43	6.67
Venus....	7,687	68,000,000	224 16 49 10	1.91
The Earth	7,912	95,000,000	365 6 9 12	1.
The Moon	2,180	95,000,000	365 6 9 12	1.
Mars	4,189	144,000,000	686 23 30 35	0.43 .
Vesta	238	224,340,600	1,325 11 38 24	....
Iris	unknown.	226,000,000	1,327 23 22 41	....
Hebe.....	"	230,000,000	1,375 nearly ...	....
Flora.....	"	240,000,000	1,469 18 37 19	....
Astrea ...	"	246,000,000	1,512 nearly ...	0.16
Juno	1,425	253,598,700	1,593 1 36 28	....
Ceres	160	263,236,450	1,684 17 38 24	....
Pallas	110	265,000,000	1,686 7 19 12	....
Jupiter ...	89,170	490,000,000	4,332 14 27 10	0.037
Saturn ...	79,042	900,000,000	10,759 1 51 11	0.011
Uranus...	35,112	1,800,000,000	30,686 19 41 32	0.003
Neptune..	35,000	2,850,000,000	60,128 3 20 02	0.001

TIDE TABLE.

CHIEFLY FROM THE TABLE IN BOWDITCH'S NAVIGATOR.

The Calendar pages exhibit the time of high water at New York, Elizabethtown Point, and New London.

To find the time of high water at any of the following places, add to or substract from the time of high water at New York, as follows: (A signifies that the annexed quantity of time is to be added, S subtracted)—For

		H.	M.
Amelia Harbor,........	S	0	24
Ann, Cape,............	A	2	36
Annapolis,.............	A	2	6
Anticosti Island, west end	S	5	24
St. Augustine,..........	S	1	24
Block Island,...........	S	1	17
Boston.................	A	2	36
Canso, Cape,....	S	0	24
Charles, Cape,..........	S	1	29
Charleston Bar, ...	S	1	39
Cod, Cape, ...	A	2	36
Delaware River, ent ...	A	0	6
Fairfield, ...	A	2	0
Fear, Cape,............	S	0	54
Florida Keys, ...	S	0	4
Gay Head, ...	S	1	17
George's River,........	A	1	51
Georgetown Bar,.......	S	1	54
Gouldsborough,........	A	2	6
Guilford, ...	A	1	30
Halifax, N. S.,.........	S	1	24
Hartford, ...	S	5	40
Hatteras, Cape,........	A	0	6
Henlopen, Cape,........	S	0	9
Henry, Cape, ...	S	1	14
Kennebec, ...	A	1	54
Lookout, Cape, ...	A	0	6
Machias,...............	A	2	6
Marblehead,...........	A	2	30
May, Cape, ...	S	0	9
Mount Desert, ...	A	2	6
New Bedford,..........	S	1	17
Newburyport, ...	A	2	21
New Haven, ...	A	1	22
Norwich Landing, ...	A	0	45
Passamaquoddy River, .	A	2	36
Penobscot River,.......	A	1	51
Philadelphia,...........	A	5	0
Plymouth, ...	A	2	36
Portland, ...	A	1	51
Port Royal Island,......	S	0	39
Portsmouth, ...	A	2	21
Quebec, Canada,.......	S	0	5
Rhode Island, ...	S	2	9
Roman, Cape,..........	S	9	54
Sable, Cape, ...	S	0	54
Salem,............	A	2	36
Sandy Hook, N. J.,.....	S	2	17
Saybrook,..............	A	0	15
St. Johns, N F., ...	S	2	54
St. Simon's Bar,........	S	1	24
Sunbury,.........	A	0	36
Townsend, ...	A	1	51

THE NEW STYLE

Was adopted in Catholic countries by order of Pope Gregory XIII, in 1582—the 5th of October was called the 15th, omitting ten days. Protestant Britain adopted this rule 1752, calling the 3d of September the 14th, omitting eleven nominal days. Russia adheres to the old style, the difference from the new being now twelve days. Up to 1752, the year was held to begin in England with the 25th of March; 1751 did so, but 1752 began January 1, by act of Parliament, agreeably to the Gregorian or Roman Catholic Calendar, which is the true time, with only an error of one day in about 3,000 years.

CHARACTERS.

☼☉ Sun; ☽ Moon; ☿ Mercury; ♀ Venus; ⊕ Earth; ♂ Mars; ♃ Jupiter; ♄ Saturn; ♅ Herschel.

EQUATION OF TIME.

Almanacs often contain the expressions, "*sun fast*," and "*sun slow*." They refer to the difference of time as shown by the sun, and as shown by a good clock or watch. Time as marked by the *former* is called "*apparent*," and as marked by the *latter*, "*mean time*." A good *sundial* will always tell the *former*; a *watch* or *clock*, the *latter*. The calculations of most almanacs are given in *mean* or clock time.

APOGEE AND PERIGEE OF THE SUN.

In 1852, the Sun will be in

Perigee January 2,	distant from the Earth.	93,575,000	Miles.
Apogee July 2, ..		96,768,000	
Perigee Dec. 30, .		93,573,000	

CHRONOLOGICAL CYCLES.

Dominical Letters, D and C; Golden Number, or Lunar Cycle, 10; Epact, 9; Solar Cycle, 13; Roman Indiction, 10; Julian Period, 6565.

SIGNS OF THE ZODIAC.

♈ Aries; ♉ Taurus; ♊ Gemini; ♋ Cancer; ♌ Leo; ♍ Virgo; ♎ Libra; ♏ Scorpio; ♐ Sagittarius; ♑ Capricorn; ♒ Aquarius; ♓ Pisces.

LEAP-YEAR.

Every year is *leap-year*, the number of which can be divided by 4, and not by 100; or which can be divided by 400.

LIMA BEANS AND MELONS.

To get Lima beans early, and to prevent the seed rotting in the soil, plant them on pieces of inverted turf, and cover them an inch or two deep with rich mould. These pieces of turf may be placed in a hot-bed, or in a fermenting heap of manure; and it will be found convenient to place a number of them in a shallow box together, until they have appeared above ground, when they are ready to set out in open ground. If a piece of turf is laid upon each, until they are well sprouted, it will serve to retain the heat which comes up from below, but it must be timely removed. Melons and cucumbers may be started in the same way. Their growth may be advanced, and the young melons protected from bugs, by setting four common bricks round each hill, and covering with a pane of glass. When they have grown up to the glass, they will need no further protection, and the whole is at once removed. A single square box, open at top and bottom, six or eight inches high, made tight round each hill, will nearly or wholly exclude bugs from melons, cucumbers, and squashes.

White-wash.—Take two quarts of skimmed milk; two ounces of fresh-slaked lime; two pounds whiting; or the same proportions for any larger quantity. Put the lime into a stone vessel, and pour upon it a sufficient quantity of milk to make a mixture resembling cream; then add the remainder of the material. When this is done, crumble and spread the whiting on the surface of the fluid, in which it will gradually sink. It must then be well stirred, or ground, as any other paint. By the addition of any coloring matter, you may make it suit your fancy. It must be put on with a paint brush, and when dry, a second coat should be given. The quantity named, is sufficient for twenty-five square yards.

1st Month. JANUARY, 1852. 31 Days

MOON'S PHASES.	BOSTON. D. H. M.	NEW-YORK. H.M.	BALTIM'RE. H. M.	CHARLES'N. H. M.	SUN ON MERIDIAN. D. H. M. S.
Full Moon	7 1 25 mo.	1 13 mo.	1 2 mo.	0 49 mo.	1 ev. 3 43
Third Quarter.	13 8 34 ev.	8 22 ev.	8 11 ev.	7 58 ev.	9 0 7 17
New Moon	21 2 43 mo.	2 31 mo.	2 20 mo.	2 7 mo.	17 0 10 18
First Quarter.	29 5 50 mo.	5 38 mo.	5 27 mo.	5 14 mo.	25 0 12 35

The care of stock, procuring fuel, cutting timber-logs, and getting them to the saw-mill, occupy the farmer's attention this month. It is a good month to feed out the coarsest and poorest fodder—the coldness of the weather giving the stock sharp appetites.

Day of Month.	Day of Week.	Sun's decl'n S.	CALENDAR For Boston, New-England, New-York State, Michigan, Wisconsin, and Iowa.				CALENDAR For New-York City, Philadelphia, Conn., New-Jersey, Pennsyl'n, Ohio, Indiana, and Illinois.				CALENDAR For Baltimore, Virginia, Kentucky, and Missouri.			CALENDAR For Charleston, N Carolina, Tenn., Georgia, Alabama, Mississippi, and Louisiana.			
			Sun rises	Sun sets.	Moon sets.	H. W. Boston	Sun rises.	Sun. sets.	Moon sets	H W. N Y'k	Sun rises.	Sun sets.	Moon sets.	Sun rises.	Sun sets.	Moon sets.	H. W. Chl'tn.
		° ′ ″	H.M.	H.M.	H. M.	H. M.	H.M.	H.M.	H. M.	H. M.	H.M.	H.M.	H. M.	H.M.	H.M.	H. M.	H. M.
1	Thursday	23 2 28	7 32	4 35	1 35	5 54	7 27	4 41	1 34	2 54	7 23	4 45	1 33	7 5	5 3	1 29	1 54
2	Friday	22 57 25	7 32	4 36	2 35	7 1	7 27	4 42	2 34	4 1	7 23	4 46	2 32	7 5	5 4	2 25	3 1
3	Saturday	22 51 54	7 32	4 37	3 38	8 3	7 27	4 43	3 35	5 3	7 23	4 47	3 33	7 5	5 4	3 22	4 3
4	**D**	22 45 55	7 32	4 38	4 42	9 4	7 27	4 43	4 38	6 4	7 23	4 47	4 35	7 5	5 5	4 22	5 4
5	Monday	22 39 31	7 32	4 39	5 46	9 58	7 27	4 44	5 41	6 58	7 23	4 48	5 38	7 5	5 6	5 22	5 58
6	Tuesday	22 32 38	7 32	4 40	rises.	10 42	7 27	4 45	rises.	7 42	7 23	4 49	rises.	7 5	5 7	rises.	6 42
7	Wednesday	22 25 19	7 32	4 41	5 20	11 27	7 27	4 46	5 26	8 27	7 23	4 50	5 31	7 6	5 7	5 49	7 27
8	Thursday	22 17 33	7 32	4 42	6 28	ev 9	7 27	4 47	6 34	9 9	7 23	4 51	6 38	7 6	5 8	6 54	8 9
9	Friday	22 9 22	7 32	4 43	7 41	0 52	7 27	4 48	7 45	9 52	7 23	4 52	7 49	7 6	5 9	8 2	8 52
10	Saturday	22 0 45	7 32	4 44	8 54	1 35	7 26	4 49	8 57	10 35	7 23	4 53	9 0	7 6	5 10	9 9	9 35
11	**D**	21 51 40	7 31	4 45	10 7	2 20	7 26	4 50	10 9	11 20	7 22	4 54	10 11	7 5	5 11	10 16	10 20
12	Monday	21 42 11	7 31	4 46	11 19	3 5	7 26	4 51	11 20	ev 5	7 22	4 55	11 21	7 5	5 12	11 22	11 5
13	Tuesday	21 32 17	7 31	4 47	morn	3 56	7 26	4 52	morn	0 56	7 22	4 56	morn	7 5	5 13	morn	11 56
14	Wednesday	21 21 58	7 30	4 49	0 31	4 49	7 25	4 54	0 30	1 49	7 22	4 57	0 30	7 5	5 14	0 27	ev 49
15	Thursday	21 11 14	7 30	4 50	1 42	5 49	7 25	4 55	1 40	2 49	7 21	4 58	1 39	7 5	5 14	1 32	1 49
16	Friday	21 0 6	7 29	4 51	2 52	7 0	7 25	4 56	2 49	4 0	7 21	4 59	2 47	7 5	5 15	2 36	3 0
17	Saturday	20 48 34	7 29	4 52	4 1	8 12	7 24	4 57	3 57	5 12	7 20	5 1	3 54	7 4	5 16	3 40	4 12
18	**D**	20 36 37	7 28	4 53	5 6	9 24	7 24	4 58	5 2	6 24	7 20	5 2	4 58	7 4	5 17	4 42	5 24
19	Monday	20 24 17	7 28	4 55	6 7	10 24	7 23	4 59	6 2	7 24	7 19	5 3	5 58	7 4	5 18	5 40	6 24
20	Tuesday	20 11 35	7 27	4 56	7 1	11 14	7 22	5 0	6 56	8 14	7 19	5 4	6 52	7 4	5 19	6 34	7 14
21	Wednesday	19 58 30	7 26	4 57	sets.	11 59	7 22	5 2	sets.	8 59	7 18	5 5	sets.	7 3	5 20	sets.	7 59
22	Thursday	19 45 1	7 26	4 58	6 24	morn	7 21	5 3	6 28	9 39	7 18	5 6	6 32	7 3	5 21	6 46	8 39
23	Friday	19 31 12	7 25	5 0	7 25	0 39	7 21	5 4	7 29	10 15	7 17	5 7	7 32	7 3	5 22	7 43	9 15
24	Saturday	19 17 0	7 24	5 1	8 26	1 15	7 20	5 5	8 29	10 50	7 17	5 9	8 31	7 2	5 23	8 28	9 50
25	**D**	19 2 28	7 23	5 2	9 25	1 50	7 19	5 6	9 27	11 24	7 16	5 10	9 28	7 2	5 24	9 32	10 24
26	Monday	18 47 34	7 23	5 3	10 24	2 24	7 18	5 8	10 24	11 58	7 15	5 11	10 25	7 1	5 25	10 26	10 58
27	Tuesday	18 32 21	7 22	5 5	11 22	2 58	7 18	5 9	11 22	morn	7 14	5 12	11 22	7 1	5 26	11 19	11 32
28	Wednesday	18 16 46	7 21	5 6	morn	3 32	7 17	5 10	morn	0 32	7 14	5 13	morn	7 0	5 27	morn	morn
29	Thursday	18 0 53	7 20	5 7	0 21	4 10	7 16	5 11	0 20	1 10	7 13	5 14	0 19	6 59	5 28	0 13	0 10
30	Friday	17 44 40	7 19	5 9	1 22	4 51	7 15	5 13	1 20	1 51	7 12	5 16	1 18	6 59	5 29	1 9	0 51
31	Saturday	17 28 8	7 18	5 10	2 24	5 44	7 14	5 14	2 21	2 44	7 11	5 17	2 18	6 58	5 30	2 6	1 44

AGRICULTURAL PAPERS.

If you wish for oaks, plant acorns; the largest giant of the forest came from a little seed weighing not the quarter of an ounce. If that seed had been locked up in a chest, where had been the huge vegetable monarch? A farmer discovered how he could raise one bushel of corn more on an acre, with the same labor—this was to him worth something—at least fifty dollars in ten years. But like the acorn in the chest, this knowledge remained a long time locked up within himself. But after a while it found its way into an agricultural paper, and ten thousand readers saw, and one thousand of them were practically benefitted by the information; so that instead of a saving of fifty dollars only, FIFTY THOUSAND dollars were saved. The acorn thus became the monarch of the woods.

Agricultural papers have rendered great service in a multitude of ways. Look at the improvements that have been introduced within the last twenty years, through their influence, in plows, cultivators, seed-drills, harvesting machines, thrashing-machines, horse-rakes, straw-cutters; the improved breeds and blood in horses, cattle, swine; the improvements in the management of farms, as by rotation, seeding, harvesting, manuring, draining, subsoiling; and in the introduction and cultivation of fine and profitable fruit. It is true some of these improvements have been effected without the direct influence of such publications; but like the acorn in the chest, they would have remained in a great degree unknown, without some faster way to spread the facts, than merely neighbor talking with neighbor. So great have been these advantages, that an intelligent southern gentleman gave it as his opinion, that a single paper (*the Albany Cultivator*) had been the means of increasing the wealth of that part of the country *more than two millions of dollars*. One farmer said it had been the means of increasing his corn crop from twenty to thirty per cent, and another succeeded in doubling his corn crop. Let such benefits be multiplied through the country at large, and how enormous would be the aggregate profits!

THE CULTIVATOR.

A MONTHLY JOURNAL OF

Agriculture, Horticulture, and Rural Economy.

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☞ EVERY FARMER and GARDENER should order this—the best Agricultural Journal. Each number consists of thirty-two pages, of the same size and style as this Almanac.

Letters addressed to LUTHER TUCKER, Editor Cultivator, Albany, N. Y., will be promptly attended to.

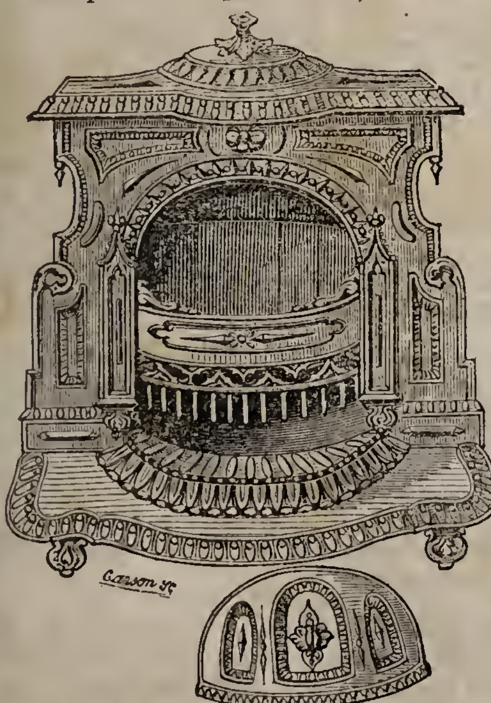
2d Month. **FEBRUARY, 1852.** **29 Days.**

MOON'S PHASES.	BOSTON.	NEW-YORK.	BALTIM'RE.	CHARLES'N.	SUN ON MERIDIAN.
	D. H. M.	H. M.	H. M.	H. M.	D. H. M. S.
Full Moon.....	5 2 9 ev.	1 57 ev.	1 46 ev.	1 33 ev.	1 0 13 52
Third Quarter.	12 5 19 mo.	5 7 mo.	4 56 mo.	4 43 mo.	9 0 14 30
New Moon	19 8 10 ev.	7 58 ev.	7 47 ev.	7 34 ev.	17 0 14 19
First Quarter..	28 0 47 mo.	0 35 mo.	0 24 mo.	0 11 mo.	25 0 13 24

GRAFTS may be cut this month. They should be kept in a cool, moist place, and care should be taken that rats and mice do not injure them by gnawing the bark. Cows and ewes which are forward with young, should be carefully attended to, and have strengthening food.

Day of Month.	Day of Week.	Sun's decl'n S.	CALENDAR For Boston, New-England, New-York State, Michigan, Wisconsin, and Iowa.				CALENDAR For New-York City, Philadelphia, Conn., New-Jersey, Pennsyl'a, Ohio, Indiana, and Illinois.				CALENDAR For Baltimore, Virginia, Kentucky, and Missouri.			CALENDAR For Charleston, N. Carolina, Tenn., Georgia, Alabama, Mississippi, and Louisiana.			
			Sun rises.	Sun sets.	Moon sets.	H. W. Boston	Sun rises.	Sun sets.	Moon sets.	H. W N. Y'k	Sun rises.	Sun sets.	Moon sets.	Sun rises.	Sun sets.	Moon sets.	H. W. Ch'ton
		° ′ ″	H.M.	H.M.	H. M.	H. M.	H.M.	H.M.	H. M.	H. M.	H.M.	H.M.	H. M.	H.M.	H.M.	H. M.	H. M.
1	D	17 11 17	7 17	5 11	3 27	6 55	7 13	5 15	3 23	3 55	7 10	5 18	3 19	6 57	5 31	3 5	2 55
2	Monday........	16 54 8	7 16	5 13	4 30	8 6	7 12	5 16	4 25	5 6	7 9	5 19	4 21	6 57	5 32	4 5	4 6
3	Tuesday	16 36 43	7 15	5 14	5 30	9 20	7 11	5 18	5 25	6 20	7 8	5 20	5 21	6 56	5 33	5 4	5 20
4	Wednesday	16 18 59	7 14	5 15	6 25	10 20	7 10	5 19	6 20	7 20	7 7	5 22	6 16	6 55	5 33	6 0	6 20
5	Thursday, ...	16 0 59	7 13	5 17	rises.	11 9	7 9	5 20	rises.	8 9	7 6	5 23	rises.	6 55	5 34	rises.	7 9
6	Friday.........	15 42 42	7 11	5 18	6 34	11 57	7 8	5 21	6 38	8 57	7 5	5 24	6 41	6 54	5 35	6 52	7 57
7	Saturday	15 24 9	7 10	5 19	7 50	ev 40	7 7	5 23	7 53	9 40	7 4	5 25	7 55	6 53	5 36	8 2	8 40
8	D	15 5 21	7 9	5 21	9 5	1 23	7 6	5 24	9 7	10 23	7 3	5 26	9 8	6 52	5 37	9 10	9 23
9	Monday........	14 46 19	7 8	5 22	10 19	2 6	7 5	5 25	10 19	11 6	7 2	5 28	10 19	6 51	5 38	10 18	10 6
10	Tuesday	14 26 59	7 7	5 23	11 32	2 50	7 3	5 26	11 31	11 50	7 1	5 29	11 30	6 50	5 39	11 24	10 50
11	Wednesday	14 7 26	7 5	5 25	morn	3 36	7 2	5 28	morn	ev 36	7 0	5 30	morn	6 50	5 40	morn	11 36
12	Thursday	13 47 39	7 4	5 26	0 44	4 21	7 1	5 29	0 41	1 21	6 59	5 31	0 39	6 49	5 41	0 30	ev 21
13	Friday.........	13 27 38	7 3	5 27	1 53	5 14	7 0	5 30	1 50	2 14	6 57	5 32	1 47	6 48	5 42	1 34	1 14
14	Saturday.......	13 7 25	7 1	5 28	3 0	6 21	6 58	5 31	2 55	3 21	6 56	5 33	2 52	6 47	5 43	2 36	2 21
15	D	12 46 58	7 0	5 30	4 1	7 45	6 57	5 32	3 56	4 45	6 55	5 35	3 52	6 46	5 44	3 35	3 45
16	Monday........	12 26 18	6 58	5 31	4 56	9 8	6 56	5 34	4 51	6 8	6 54	5 36	4 47	6 45	5 44	4 29	5 8
17	Tuesday	12 5 27	6 57	5 32	5 44	10 15	6 54	5 35	5 39	7 15	6 52	5 37	5 36	6 44	5 45	5 18	6 15
18	Wednesday	11 44 25	6 56	5 34	6 25	11 5	6 53	5 36	6 21	8 5	6 51	5 38	6 17	6 43	5 46	6 2	7 5
19	Thursday	11 23 11	6 54	5 35	sets.	11 49	6 52	5 37	sets.	8 49	6 50	5 39	sets.	6 42	5 47	sets.	7 49
20	Friday.........	11 1 46	6 53	5 36	6 15	morn	6 50	5 38	6 19	9 24	6 49	5 40	6 21	6 41	5 48	6 30	8 24
21	Saturday.......	10 40 12	6 51	5 37	7 15	0 24	6 49	5 40	7 17	9 56	6 47	5 41	7 19	6 40	5 49	7 25	8 56
22	D	10 18 27	6 50	5 39	8 14	0 56	6 48	5 41	8 15	10 28	6 46	5 42	8 16	6 39	5 50	8 18	9 28
23	Monday........	9 56 33	6 48	5 40	9 13	1 28	6 46	5 42	9 13	10 58	6 44	5 44	9 13	6 37	5 50	9 12	9 58
24	Tuesday	9 34 31	6 47	5 41	10 12	1 58	6 45	5 43	10 10	11 28	6 43	5 45	10 10	6 36	5 51	10 5	10 28
25	Wednesday	9 12 19	6 45	5 42	11 11	2 28	6 43	5 44	11 9	11 58	6 42	5 46	11 7	6 35	5 52	10 59	10 58
26	Thursday, ...	8 49 59	6 44	5 44	morn	2 58	6 42	5 46	morn	morn	6 40	5 47	morn	6 34	5 53	11 55	11 32
27	Friday.........	8 27 32	6 42	5 45	0 11	3 32	6 40	5 47	0 8	0 32	6 39	5 48	0 6	6 33	5 54	morn	morn
28	Saturday.......	8 4 57	6 40	5 46	1 12	4 5	6 39	5 48	1 9	1 5	6 37	5 49	1 6	6 32	5 55	0 52	0 5
29	D	7 42 15	6 39	5 47	2 14	4 51	6 37	5 49	2 9	1 51	6 36	5 50	2 6	6 31	5 55	1 50	0 51

HEATING APPARATUS FOR DWELLINGS.



THE substitution of stoves for open fire-places, has effected a great saving of fuel, and in a pecuniary view is an important improvement; but it is more than probable that in our efforts to secure this advantage in the greatest degree, an injurious sacrifice of health has been in many cases sustained. A serious objection to close stoves is, that they tend to prevent the renewal of the air of the room, and give off, more or less, noxious fumes. The injury in the latter particular of course depends on the nature of the fuel employed. Anthracite and bituminous coals often contain sulphur, and sometimes arsenic, and when burned in stoves without free draught, evolve gases which contaminate the air. Dr. URE speaks of such stoves as "pseudo-economical," and says—"There is no mode in which the health and life of a person can be placed in more insidious jeopardy, than by sitting in a room with its chimney closed up with such a choke-damp-vomiting stove." Of late, attention has been directed to obviating the objections to close stoves, without incurring a large loss on the score of economy. Considerable success has in several instances been attained in this respect, but so far as the writer is acquainted, the object has been most perfectly accomplished by the "Franklin Coal Burner," represented by the accompanying cut. It possesses the advantages of the Franklin Fire-Place, or open grate, with the additional advantage that it may be set in any part of the room, and connected with the chimney by pipe. It is neat and tasteful in design, and superior in respect to finish and quality of casting,—and affords the cheerful light of an open fire, with sufficient ventilation for health, making, at the same time, but a comparatively small consumption of fuel. We have tested it for anthracite coal, with which it operates in the most satisfactory manner. It is equally well adapted to burning bituminous coal. It was introduced here, and is made by Messrs. JAGGER, TRADWELL & PERRY, Eagle Air Furnace and Machine Works, Albany.

3d Month. **MARCH, 1852.** **31 Days.**

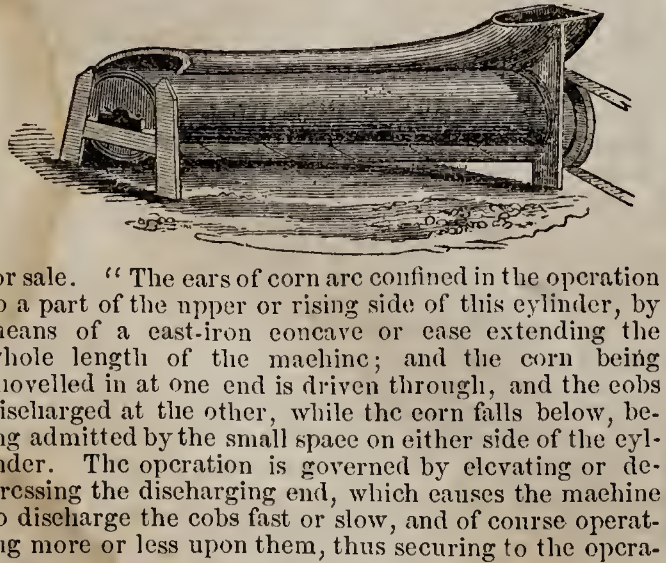
MOON'S PHASES.	BOSTON.	NEW-YORK.	BALTIM'RE.	CHARLES'N.	SUN ON MERIDIAN.
	D. H. M.	H.M.	H. M.	H. M.	D. H. M. S.
Full Moon.....	6 0 46 mo.	0 34 mo.	0 23 mo.	0 10 mo.	1 0 12 29
Third Quarter.	12 3 45 ev.	3 33 ev.	3 22 ev.	3 9 ev.	9 0 10 36
New Moon....	20 1 59 ev.	1 47 ev.	1 36 ev.	1 23 ev.	17 0 8 22
First Quarter..	28 4 6 ev.	3 54 ev.	3 43 ev.	3 30 ev.	25 0 5 56

Cows which have calved should have succulent food, as carrots, and good *early-cut* hay. With such food and warm shelter, they will give as much and as rich milk as on grass. The juice of currants mixed with cream before churning, will impart a good color to butter.

Day of Month.	Day of Week.	Sun's decl'n S.	CALENDAR For Boston, New-England, New-York State, Michigan, Wisconsin, and Iowa.				CALENDAR For New-York City, Philadelphia, Conn., New-Jersey, Pennsyl'a, Ohio, Indiana, and Illinois.				CALENDAR For Baltimore, Virginia, Kentucky, and Missouri.			CALENDAR For Charleston, N. Carolina, Tenn., Georgia, Alabama, Mississippi, and Louisiana.			
			Sun rises	Sun sets	Moon sets	H. W. Boston	Sun rises.	Sun sets.	Moon sets.	H W. N Y'k	Sun rises	Sun sets.	Moon sets.	Sun rises	Sun sets.	Moon sets.	H. W. Chl'tn.
		° ′ ″	H.M.	H.M.	H. M.	H. M.	H.M.	H.M.	H. M.	H. M.	H.M.	H.M.	H. M.	H.M.	H.M.	H. M.	H. M.
1	Monday........	7 19 26	6 37	5 49	3 14	5 56	6 36	5 50	3 9	2 56	6 34	5 51	3 5	6 29	5 56	2 48	1 56
2	Tuesday	6 56 32	6 35	5 50	4 10	7 20	6 34	5 51	4 5	4 20	6 33	5 52	4 1	6 28	5 57	3 44	3 20
3	Wednesday.....	6 33 32	6 34	5 51	5 1	8 43	6 32	5 52	4 56	5 43	6 31	5 53	4 53	6 27	5 58	4 37	4 43
4	Thursday	6 10 27	6 32	5 52	5 46	9 58	6 31	5 54	5 42	6 58	6 30	5 54	5 39	6 26	5 59	5 26	5 58
5	Friday	5 47 16	6 31	5 53	rises.	10 52	6 29	5 55	rises.	7 52	6 28	5 55	rises.	6 24	5 59	rises.	6 52
6	Saturday.......	5 24 1	6 29	5 55	6 40	11 37	6 28	5 56	6 42	8 37	6 27	5 57	6 43	6 23	6 0	6 48	7 37
7	☾	5 0 41	6 27	5 56	7 57	ev 20	6 26	5 57	7 58	9 20	6 25	5 58	7 58	6 22	6 1	7 59	8 20
8	Monday........	4 37 18	6 26	5 57	9 14	1 3	6 25	5 58	9 13	10 3	6 24	5 59	9 12	6 21	6 2	9 8	9 3
9	Tuesday	4 13 51	6 24	5 58	10 29	1 46	6 23	5 59	10 27	10 46	6 22	6 0	10 25	6 19	6 2	10 17	9 46
10	Wednesday.....	3 50 21	6 22	5 59	11 42	2 28	6 21	6 0	11 39	11 28	6 21	6 1	11 36	6 18	6 3	11 24	10 28
11	Thursday	3 26 48	6 20	6 1	morn	3 12	6 20	6 1	morn	ev 12	6 19	6 2	morn	6 17	6 4	morn	11 12
12	Friday	3 3 13	6 19	6 2	0 52	3 56	6 18	6 2	0 48	0 56	6 18	6 3	0 44	6 16	6 5	0 29	11 56
13	Saturday.......	2 39 35	6 17	6 3	1 56	4 45	6 16	6 3	1 52	1 45	6 16	6 4	1 48	6 14	6 5	1 30	ev 45
14	☾	2 15 55	6 15	6 4	2 54	5 51	6 15	6 5	2 49	2 51	6 14	6 5	2 45	6 13	6 6	2 27	1 51
15	Monday........	1 52 15	6 13	6 5	3 44	7 20	6 13	6 6	3 39	4 20	6 13	6 6	3 35	6 12	6 7	3 17	3 20
16	Tuesday	1 28 35	6 12	6 6	4 26	8 48	6 11	6 7	4 22	5 48	6 11	6 7	4 18	6 10	6 8	4 2	4 48
17	Wednesday.....	1 4 51	6 10	6 8	5 2	10 1	6 10	6 8	4 59	7 1	6 10	6 8	4 56	6 9	6 8	4 42	6 1
18	Thursday	0 41 9	6 8	6 9	5 33	10 48	6 8	6 9	5 30	7 48	6 8	6 9	5 28	6 8	6 9	5 17	6 48
19	Friday	S. 17 26	6 7	6 10	6 1	11 27	6 7	6 10	5 59	8 27	6 7	6 10	5 57	6 6	6 10	5 49	7 27
20	Saturday.......	N. 6 16	6 5	6 11	sets.	morn	6 5	6 11	sets.	9 1	6 5	6 11	sets.	6 5	6 10	sets.	8 1
21	☾	0 29 58	6 3	6 12	7 6	0 1	6 3	6 12	7 6	9 30	6 3	6 12	7 6	6 4	6 11	7 6	8 30
22	Monday........	0 53 38	6 1	6 13	8 4	0 30	6 2	6 13	8 4	10 0	6 2	6 13	8 3	6 2	6 12	8 0	9 0
23	Tuesday	1 17 15	6 0	6 14	9 4	1 0	6 0	6 14	9 2	10 29	6 0	6 14	9 1	6 1	6 13	8 53	9 29
24	Wednesday	1 40 52	5 58	6 16	10 4	1 29	5 58	6 15	10 1	10 59	5 59	6 15	9 59	6 0	6 13	9 48	9 59
25	Thursday......	2 4 26	5 56	6 17	11 4	1 59	5 57	6 16	11 0	11 26	5 57	6 16	10 58	5 59	6 14	10 44	10 26
26	Friday	2 27 57	5 54	6 18	morn	2 26	5 55	6 17	12 0	11 59	5 55	6 17	11 57	5 57	6 15	11 41	10 59
27	Saturday.......	2 51 25	5 53	6 19	0 5	2 59	5 53	6 18	morn	morn	5 54	6 18	morn	5 56	6 15	morn	11 35
28	☾	3 14 49	5 51	6 20	1 4	3 35	5 52	6 19	0 59	0 35	5 52	6 19	0 55	5 55	6 16	0 38	morn
29	Monday	3 38 9	5 49	6 21	2 0	4 20	5 50	6 20	1 55	1 20	5 51	6 20	1 51	5 53	6 17	1 33	0 20
30	Tuesday	4 1 26	5 47	6 22	2 51	5 21	5 48	6 21	2 47	2 21	5 49	6 21	2 43	5 52	6 17	2 26	1 21
31	Wednesday	4 24 37	5 46	6 23	3 37	6 47	5 47	6 22	3 33	3 47	5 47	6 22	3 30	5 51	6 18	3 15	2 47

SMITH'S PATENT CORN-SHELLER.

For shelling corn on a large scale, this is probably the best machine in use. It is a horizontal toothed cylinder, six feet long, and fourteen inches in diameter. It can be operated by water, steam, or horse-power, and hence would be very valuable in the western states, where Indian corn is grown in very great quantities. The following description we find in the catalogue of Messrs. Emery & Co., Albany, who have the machine for sale. "The ears of corn are confined in the operation to a part of the upper or rising side of this cylinder, by means of a cast-iron concave or case extending the whole length of the machine; and the corn being shovelled in at one end is driven through, and the cobs discharged at the other, while the corn falls below, being admitted by the small space on either side of the cylinder. The operation is governed by elevating or depressing the discharging end, which causes the machine to discharge the cobs fast or slow, and of course operating more or less upon them, thus securing to the operator the means of finishing his work. It is capable of shelling two hundred bushels of ears per hour with our two-horse power. Price $45 and $50."



DOMESTIC AND RURAL HINTS.

Soot accumulates in winter, and shingles become very dry, and many houses are burned by the ignition of the former. Every one should therefore keep his chimneys clear.

Paint.—Farming tools, wagons and carriages, and roofs, should be painted white or a very light color, to prevent heating in the sun, warping and cracking. A tin-covered roof is always accompanied with a cool garret.

Door latches.—A great deal of noise about house may be prevented by keeping latches and locks properly oiled.

Everything in its place.—The man who loses half an hour daily going for or hunting displaced tools, loses 150 hours per year, or about half a month working time.

Everything under shelter.—The wagons, carts, plows, harrows, cultivator, horse-rake, &c., cost on many farms at least $300. They wear out or break in half the time they would otherwise endure, by exposure; that is $600, with interest, has to be paid, where $300 might answer with care.

Painting Roofs.—The roofs of all buildings should be painted of as light a color as practicable. Dark colors or black, absorb the sun's rays, warp the shingles, and render the garret and upper rooms uncomfortably hot.

4th Month. **APRIL, 1852.** **30 Days**

MOON'S PHASES.	BOSTON.	NEW-YORK.	BALTIM'RE.	CHARLES'N.	SUN ON MERIDIAN.
	D. H. M.	H. M.	H. M.	H. M.	D. H. M. S.
Full Moon.....	4 9 40 mo.	9 28 mo.	9 17 mo.	9 4 mo.	1 0 3 47
Third Quarter.	11 4 15 mo.	4 3 mo.	3 52 mo.	3 39 mo.	9 0 1 27
New Moon	19 7 1 mo.	6 49 mo.	6 38 mo.	6 25 mo.	17 morning.
First Quarter..	27 3 19 mo.	3 7 mo.	2 56 mo.	2 43 mo.	25 11 57 47

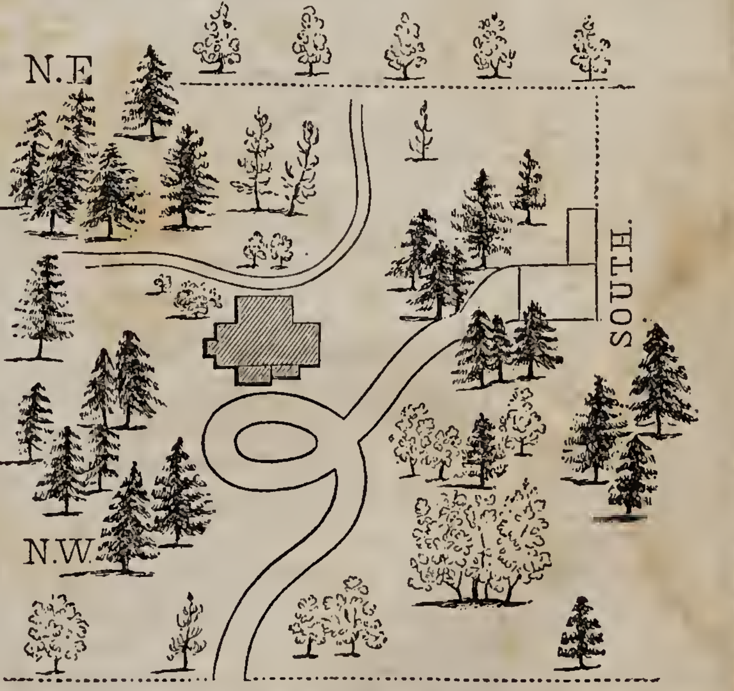
Sow spring wheat, and oats, as soon as the ground is dry enough to plow. The earlier these crops can be got in, except where the wheat midge is likely to attack the wheat, the better. Late sowing is sometimes expedient to avoid the insect. Plant early potatoes on warm land.

Day of Month.	Day of Week.	Sun's decl'n N.	CALENDAR For Boston, New-England, New-York State, Michigan, Wisconsin, and Iowa.				CALENDAR For New-York City, Philadelphia, Conn., New-Jersey, Pennsyl'a, Ohio, Indiana, and Illinois.				CALENDAR For Baltimore, Virginia, Kentucky, and Missouri.			CALENDAR For Charleston, N. Carolina, Tenn., Georgia, Alabama, Mississippi, and Louisiana.			
			Sun rises.	Sun sets	Moon sets.	H. W Boston	Sun rises	Sun sets.	Moon sets.	H. W. N. Y'k	Sun rises.	Sun sets.	Moon sets.	Sun rises.	Sun sets.	Moon sets	H. W. Ch'ton
		° ′ ″	H.M.	H.M.	H. M.	H. M.	H.M.	H.M.	H. M.	H. M.	H.M.	H.M.	H. M.	H.M.	H.M.	H. M.	H. M.
1	Thursday, ...	4 47 45	5 44	6 24	4 18	8 16	5 45	6 23	4 15	5 16	5 46	6 23	4 12	5 49	6 19	4 1	4 16
2	Friday..........	5 10 47	5 42	6 26	4 54	9 34	5 43	6 24	4 52	6 34	5 44	6 24	4 51	5 48	6 20	4 43	5 34
3	Saturday	5 33 43	5 40	6 27	5 27	10 24	5 42	6 25	5 27	7 24	5 43	6 24	5 26	5 47	6 20	5 22	6 24
4	C	5 56 33	5 39	6 28	rises.	11 13	5 40	6 26	rises.	8 13	5 41	6 25	rises.	5 45	6 21	rises.	7 13
5	Monday.........	6 19 18	5 37	6 29	8 4	11 55	5 38	6 28	8 2	8 55	5 40	6 26	8 1	5 44	6 22	7 55	7 55
6	Tuesday	6 41 55	5 35	6 30	9 21	ev 38	5 37	6 29	9 18	9 38	5 38	6 27	9 16	5 43	6 22	9 5	8 38
7	Wednesday	7 4 26	5 34	6 31	10 35	1 21	5 35	6 30	10 31	10 21	5 36	6 28	10 28	5 42	6 23	10 14	9 21
8	Thursday	7 26 50	5 32	6 32	11 45	2 3	5 34	6 31	11 40	11 3	5 35	6 29	11 37	5 40	6 24	11 20	10 3
9	Friday..........	7 49 6	5 30	6 33	morn	2 46	5 32	6 32	morn	11 46	5 33	6 30	morn	5 39	6 24	morn	10 46
10	Saturday.......	8 11 14	5 29	6 35	0 48	3 31	5 30	6 33	0 43	ev 31	5 32	6 31	0 38	5 38	6 25	0 20	11 31
11	C	8 33 15	5 27	6 36	1 42	4 26	5 29	6 34	1 37	1 26	5 30	6 32	1 32	5 37	6 26	1 14	ev 26
12	Monday.........	8 55 7	5 25	6 37	2 27	5 30	5 27	6 35	2 23	2 30	5 29	6 33	2 19	5 35	6 27	2 2	1 30
13	Tuesday	9 16 50	5 24	6 38	3 5	6 56	5 26	6 36	3 1	3 56	5 27	6 34	2 58	5 34	6 27	2 43	2 56
14	Wednesday	9 38 24	5 22	6 39	3 38	8 20	5 24	6 37	3 34	5 20	5 26	6 35	3 32	5 33	6 28	3 20	4 20
15	Thursday	9 59 49	5 20	6 40	4 6	9 31	5 23	6 38	4 3	6 31	5 24	6 36	4 2	5 32	6 29	3 53	5 31
16	Friday..........	10 21 4	5 19	6 41	4 31	10 19	5 21	6 39	4 30	7 19	5 23	6 37	4 29	5 30	6 29	4 23	6 19
17	Saturday.......	10 42 8	5 17	6 42	4 55	10 57	5 20	6 40	4 54	7 57	5 21	6 38	4 54	5 29	6 30	4 52	6 57
18	C	11 3 3	5 16	6 43	5 18	11 31	5 18	6 41	5 18	8 31	5 20	6 39	5 19	5 28	6 31	5 20	7 31
19	Monday.........	11 23 46	5 14	6 45	sets.	11 58	5 17	6 42	sets.	8 58	5 19	6 40	sets.	5 27	6 31	sets.	7 58
20	Tuesday	11 44 18	5 13	6 46	7 58	morn	5 15	6 43	7 55	9 29	5 17	6 41	7 53	5 26	6 32	7 44	8 29
21	Wednesday	12 4 39	5 11	6 47	8 58	0 29	5 14	6 44	8 55	10 0	5 16	6 42	8 52	5 25	6 33	8 40	9 0
22	Thursday, ...	12 24 47	5 10	6 48	9 59	1 0	5 12	6 45	9 55	10 29	5 14	6 43	9 51	5 24	6 34	9 36	9 29
23	Friday..........	12 44 44	5 8	6 49	10 59	1 29	5 11	6 46	10 54	11 0	5 13	6 44	10 50	5 22	6 34	10 33	10 0
24	Satnrday.......	13 4 28	5 7	6 50	11 56	2 0	5 9	6 47	11 50	11 33	5 12	6 45	11 46	5 21	6 35	11 29	10 33
25	C	13 23 59	5 5	6 51	morn	2 33	5 8	6 48	morn	morn	5 10	6 46	morn	5 20	6 36	morn	11 13
26	Monday.........	13 43 17	5 4	6 52	0 48	3 13	5 7	6 49	0 43	0 13	5 9	6 47	0 39	5 19	6 36	0 21	morn
27	Tuesday	14 2 21	5 2	6 53	1 34	4 1	5 5	6 50	1 30	1 1	5 8	6 48	1 26	5 18	6 37	1 10	0 1
28	Wednesday	14 21 11	5 1	6 55	2 15	5 1	5 4	6 51	2 12	2 1	5 6	6 49	2 9	5 17	6 38	1 55	1 1
29	Thursday	14 39 47	4 59	6 56	2 51	6 27	5 3	6 52	2 49	3 27	5 5	6 50	2 47	5 16	6 39	2 37	2 27
30	Friday	14 58 8	4 58	6 57	3 24	7 51	5 1	6 53	3 23	4 51	5 4	6 51	3 22	5 15	6 39	3 16	3 51

PROTECTION FROM WINTER WINDS.

Besides the very important purposes of shade and ornament, trees perform another exceedingly useful office,—that of sheltering from wintry winds. If evergreens are largely introduced in the plantations around dwellings, they serve wonderfully to mitigate the evils of our long and rigorous winters. A person with whom we are well acquainted, thinks he saves from ten to twenty dollars a year, in the diminished quantity of fire-wood, since the belts of pines, cedars, hemlocks, balsams, Norways, and white spruces, have grown up on the bleak sides of his house.

Now, trees may be planted awkwardly, and they may be planted tastefully. To give a few hints under the latter head, we have the above plan; more especially as writers on ornamental planting appear to have lost sight of this important utility in trees. The prevailing winds are supposed to be from the south, northwest, and northeast. Hence the plantings of evergreen trees predominate at these three points, while in other directions the view is left more open. At the same time, artificial stiffness is avoided. The number of trees may be tripled if necessary.



Average Products of an English Farm.—The following are the averages of some of the products of a farm of 740 acres, near Brighton, England, occupied by Wm. Rigden. He has 250 acres of wheat, averaging 26 bushels per acre; 40 of barley, 40 bushels; 60 in oats, 60 to 80 bushels; 240 acres in clover and grasses, two tons hay. He keeps 350 South Down ewes, which average yearly about 400 lambs; average quantity of wool yielded by the flock, four pounds per fleece, and it sells at 25 cents per lb

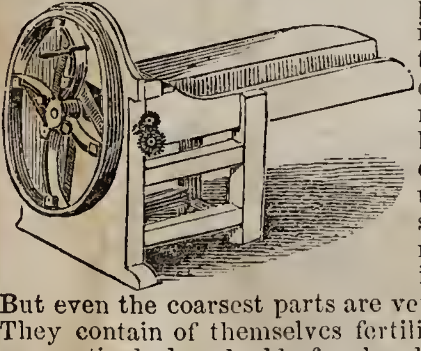
5th Month. **MAY, 1852.** **31 Days.**

MOON'S PHASES.	BOSTON.	NEW-YORK.	BALTIM'RE.	CHARLES'N.	SUN ON MERIDIAN.
	D. H. M.	H. M.	H. M.	H. M.	D. H. M. S.
Full Moon.....	3 5 39 ev.	5 27 ev.	5 16 ev.	5 3 ev.	1 11 56 54
Third Quarter.	10 6 39 ev.	6 27 ev.	6 16 ev.	6 3 ev.	9 11 56 13
New Moon....	18 10 31 ev.	10 19 ev.	10 8 ev.	9 55 ev.	17 11 56 9
First Quarter..	26 10 54 mo.	10 42 mo.	10 31 mo.	10 18 mo.	25 11 56 41

FINISH sowing spring grain Plow for corn, and plant it as soon after the middle of the month as the weather and state of the ground will justify. Plant potatoes. Sod ground, only moderately rich, moist but not wet, of a mellow, loamy soil, will be likely to give the best crop.

Day of Month.	Day of Week.	Sun's decl'n N.	CALENDAR For Boston, New-England, New-York State, Michigan, Wisconsin, and Iowa.				CALENDAR For New-York City, Philadelphia, Conn., New-Jersey, Pennsyl'a, Ohio, Indiana, and Illinois.				CALENDAR For Baltimore, Virginia. Kentucky, and Missouri.			CALENDAR For Charleston, N. Carolina, Tenn., Georgia Alabama, Mississippi, and Louisiana.			
			Sun rises	Sun sets	Moon sets	H. W. Boston	Sun rises.	Sun sets.	Moon sets.	H W. N Y'k	Sun rises	Sun sets.	Moon sets.	Sun rises.	Sun sets.	Moon sets.	H. W. Chl'm.
		° ′ ″	H.M.	H.M.	H. M.	H. M.	H.M.	H.M.	H. M.	H. M.	H.M.	H.M.	H. M.	H.M.	H.M.	H. M.	H. M.
1	Saturday.......	15 16 16	4 57	6 56	3 55	9 5	5 0	6 54	3 55	6 5	5 3	6 52	3 55	5 14	6 40	3 53	5 5
2	☾	15 34 6	4 55	6 59	4 26	9 58	4 59	6 55	4 27	6 58	5 2	6 53	4 28	5 13	6 41	4 30	5 58
3	Monday........	15 51 43	4 54	7 0	rises.	10 46	4 58	6 56	rises.	7 46	5 0	6 54	rises.	5 12	6 42	rises.	6 46
4	Tuesday	16 9 2	4 53	7 1	8 10	11 29	4 56	6 57	8 6	8 29	4 59	6 55	8 4	5 11	6 42	7 51	7 29
5	Wednesday.....	16 26 7	4 51	7 2	9 24	ev 15	4 55	6 58	9 20	9 15	4 58	6 55	9 16	5 10	6 43	9 1	8 15
6	Thursday	16 42 55	4 50	7 3	10 33	1 0	4 54	6 59	10 28	10 0	4 57	6 56	10 24	5 10	6 44	10 6	9 0
7	Friday	16 59 26	4 49	7 4	11 33	1 43	4 53	7 0	11 28	10 43	4 56	6 57	11 23	5 9	6 44	11 5	9 43
8	Saturday.......	17 15 40	4 48	7 5	morn	2 27	4 52	7 1	morn	11 27	4 55	6 58	morn	5 8	6 45	11 57	10 27
9	☾	17 31 37	4 47	7 6	0 24	3 12	4 51	7 2	0 19	ev 12	4 54	6 59	0 15	5 7	6 46	morn	11 12
10	Monday........	17 47 17	4 45	7 7	1 6	4 5	4 50	7 3	1 1	1 5	4 53	7 0	0 58	5 6	6 47	0 42	ev 5
11	Tuesday	18 2 39	4 44	7 8	1 40	5 5	4 49	7 4	1 37	2 5	4 52	7 1	1 34	5 5	6 47	1 21	1 5
12	Wednesday.....	18 17 43	4 43	7 10	2 10	6 21	4 48	7 5	2 7	3 21	4 51	7 2	2 5	5 5	6 48	1 55	2 21
13	Thursday	18 32 29	4 42	7 11	2 36	7 38	4 47	7 6	2 34	4 38	4 50	7 3	2 33	5 4	6 49	2 26	3 38
14	Friday	18 46 56	4 41	7 12	3 0	8 46	4 46	7 7	2 59	5 46	4 49	7 4	2 59	5 3	6 49	2 55	4 46
15	Saturday.......	19 1 5	4 40	7 13	3 23	9 39	4 45	7 8	3 23	6 39	4 48	7 5	3 24	5 2	6 50	3 23	5 39
16	☾	19 14 54	4 39	7 14	3 46	10 16	4 44	7 9	3 47	7 16	4 47	7 6	3 48	5 2	6 51	3 52	6 16
17	Monday........	19 28 22	4 38	7 15	4 10	10 54	4 43	7 10	4 13	7 54	4 46	7 7	4 15	5 1	6 51	4 21	6 54
18	Tuesday	19 41 32	4 37	7 16	sets.	11 27	4 42	7 11	sets.	8 27	4 45	7 7	sets.	5 1	6 52	sets.	7 27
19	Wednesday.....	19 54 22	4 36	7 17	7 53	12 0	4 41	7 12	7 48	9 0	4 45	7 8	7 45	5 0	6 53	7 31	8 0
20	Thursday	20 6 52	4 35	7 18	8 54	morn	4 40	7 13	8 49	9 31	4 44	7 9	8 45	4 59	6 54	8 29	8 31
21	Friday	20 19 1	4 35	7 18	9 52	0 31	4 39	7 14	9 47	10 5	4 43	7 10	9 43	4 59	6 54	9 25	9 5
22	Saturday.......	20 30 49	4 34	7 19	10 46	1 5	4 39	7 15	10 41	10 39	4 42	7 11	10 37	4 58	6 55	10 19	9 39
23	☾	20 42 16	4 33	7 20	11 34	1 39	4 38	7 15	11 30	11 18	4 42	7 12	11 26	4 58	6 56	11 9	10 18
24	Monday........	20 53 22	4 32	7 21	morn	2 18	4 37	7 16	morn	morn	4 41	7 13	morn	4 57	6 56	11 55	11 2
25	Tuesday	21 4 5	4 32	7 22	0 16	3 2	4 37	7 17	0 12	0 2	4 40	7 13	0 9	4 57	6 57	morn	11 52
26	Wednesday	21 14 28	4 31	7 23	0 53	3 52	4 36	7 18	0 50	0 52	4 40	7 14	0 48	4 56	6 57	0 36	morn
27	Thursday	21 24 27	4 30	7 24	1 26	4 51	4 35	7 19	1 24	1 51	4 39	7 15	1 23	4 56	6 58	1 15	0 51
28	Friday	21 34 6	4 30	7 25	1 56	6 6	4 35	7 20	1 55	3 6	4 39	7 16	1 55	4 56	6 59	1 51	2 6
29	Saturday.......	21 43 21	4 29	7 26	2 25	7 22	4 34	7 20	2 26	4 22	4 38	7 16	2 26	4 55	6 59	2 27	3 22
30	☾	21 52 14	4 29	7 26	2 55	8 27	4 34	7 21	2 57	5 27	4 38	7 17	2 58	4 55	7 0	3 3	4 27
31	Monday	22 0 44	4 28	7 27	3 27	9 26	4 33	7 22	3 30	6 26	4 37	7 18	3 33	4 55	7 0	3 42	5 26

WHEELER'S CORN-STALK CUTTER.



THERE is a double advantage in cutting corn-stalks; animals eat more of them when cut, and what they do not eat are more readily converted into manure. It is very probable that the idea of making animals live on poor food by cutting it up, is often carried too far. In regard to corn-stalks, there is more or less of the largest part, which contains little or no nutriment. The coarser the stalks, the more there is which is of no value as food. But even the coarsest parts are very useful for manure. They contain of themselves fertilizing substances, and are particularly valuable for absorbing the liquids of the barn-yard—the spongy pith taking up a large quantity. When they are not cut, they require much time to rot; and the toughness of the outer covering renders them difficult of management in the manure-heap till they have laid a long time; but by being cut in short pieces, they readily mix with the manure, and do not in the least interfere with loading or moving it with the fork or shovel. The machine represented by the accompanying cut, is one of the best for cutting stalks that we have seen; it not only cuts, but mashes the stalks, and at the same time does the work very rapidly—being capable, when operated by a horse of cutting at least five tons in a day.

WEEKLY ROUTINE OF HOUSE-WORK.

THE following has been published in substance before, but will bear repeating. A female friend of ours has continued it, (except during severe sickness,) for many years, and found it to work well. The figures stand for six working days of the week:—

2. Washing—rain or shine.
3. Baking bread and ironing—examine inventory of clothes, &c., and see that none are missing.
4. Making pies and cake—mending clothes—counting knives, forks, spoons, &c., to see all is right.
5. Miscellaneous or "extra" work.
6. Baking bread, pie, and cake—examine pickles, preserves, &c., and pork in brine.
7. Cleaning house, door-knobs, &c., and scrubbing floor.

In addition to the above, feather-beds are aired the first sunny day; and in winter, vegetables are examined weekly, to see they are not rotting or sprouting.

FRIED POTATOES.—The French method of cooking potatoes affords a most agreeable dish. The potatoes are peeled, wiped, and cut into thin slices, then thrown into a frying pan containing an abundance of hot lard. As soon as they become brown and crispy they are thrown into a collander to drain, then sprinkled with salt, and served up as hot as possible.

6th Month. **JUNE, 1852.** **30 Days.**

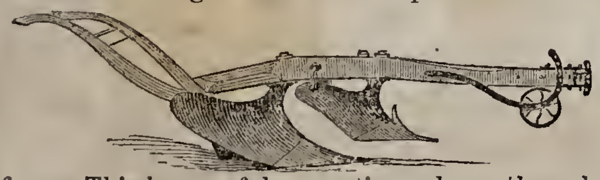
MOON'S PHASES.	BOSTON.	NEW-YORK.	BALTIM'RE.	CHARLES'N.	SUN ON MERIDIAN.
	D. H. M.	H. M.	H. M.	H. M.	D. H. M. S.
Full Moon	2 1 42 mo.	1 30 mo.	1 19 mo.	1 6 mo.	1 11 57 34
Third Quarter.	9 10 31 mo.	10 19 mo.	10 8 mo.	9 55 mo.	9 11 58 58
New Moon	17 0 3 ev.	11 51 mo.	11 40 mo.	11 27 mo.	17 ev. 0 38
First Quarter	24 4 3 ev.	3 51 ev.	3 40 ev.	3 27 ev.	25 0 2 21

Look out for weeds; kill them as soon as they come up. When they first appear above ground, a slight matter will destroy them. A scuffle or Dutch hoe, is a good tool with which to kill weeds in gardens. Ground intended to be fallowed for wheat, should be p'owed.

Day of Month.	Day of Week.	Sun's decl'n N.	CALENDAR For Boston, New-England, New-York State, Michigan, Wisconsin, and Iowa.				CALENDAR For New-York City, Philadelphia, Conn., New-Jersey, Pennsyl'a, Ohio, Indiana, and Illinois.				CALENDAR For Baltimore, Virginia, Kentucky, and Missouri.			CALENDAR For Charleston, N. Carolina, Tenn., Georgia, Alabama, Mississippi, and Louisiana.			
			Sun rises.	Sun sets.	Moon sets.	H. W. Boston	Sun rises.	Sun sets.	Moon sets	H. W N. Y'k	Sun rises.	Sun sets.	Moon sets.	Sun rises.	Sun sets.	Moon sets	H. W. Ch'ton
		° ′ ″	H.M.	H.M.	H. M.	H. M.	H.M.	H.M.	H. M.	H. M.	H.M.	H.M.	H. M.	H.M.	H.M.	H. M.	H. M.
1	Tuesday	22 8 51	4 27	7 28	4 3	10 19	4 33	7 23	4 7	7 19	4 37	7 19	4 11	4 54	7 1	4 24	6 19
2	Wednesday	22 16 35	4 27	7 29	rises.	11 10	4 32	7 23	rises.	8 10	4 36	7 19	rises.	4 54	7 2	rises.	7 10
3	Thursday,	22 23 55	4 27	7 29	9 17	11 57	4 32	7 24	9 12	8 57	4 36	7 20	9 8	4 54	7 2	8 49	7 57
4	Friday	22 30 53	4 26	7 30	10 14	ev 43	4 32	7 25	10 8	9 43	4 36	7 21	10 4	4 54	7 3	9 46	8 43
5	Saturday	22 37 26	4 26	7 31	11 1	1 27	4 31	7 25	10 56	10 27	4 35	7 21	10 52	4 53	7 3	10 35	9 27
6	☾	22 43 36	4 26	7 31	11 39	2 12	4 31	7 26	11 35	11 12	4 35	7 22	11 32	4 53	7 4	11 18	10 12
7	Monday	22 49 22	4 25	7 32	morn	2 58	4 31	7 26	morn	11 58	4 35	7 22	morn	4 53	7 4	11 55	10 58
8	Tuesday	22 54 44	4 25	7 33	0 12	3 45	4 31	7 27	0 8	ev 45	4 35	7 23	0 6	4 53	7 5	morn	11 45
9	Wednesday	22 59 42	4 25	7 33	0 39	4 36	4 30	7 28	0 37	1 36	4 35	7 23	0 35	4 53	7 5	0 27	ev 36
10	Thursday	23 4 16	4 25	7 34	1 4	5 34	4 30	7 28	1 3	2 34	4 34	7 24	1 2	4 53	7 6	0 57	1 34
11	Friday	23 8 25	4 25	7 34	1 27	6 42	4 30	7 29	1 27	3 42	4 34	7 24	1 27	4 53	7 6	1 26	2 42
12	Saturday	23 12 10	4 24	7 35	1 50	7 43	4 30	7 29	1 51	4 43	4 34	7 25	1 52	4 53	7 6	1 54	3 43
13	☾	23 15 31	4 24	7 35	2 14	8 42	4 30	7 30	2 16	5 42	4 34	7 25	2 17	4 53	7 7	2 23	4 42
14	Monday	23 18 28	4 24	7 36	2 39	9 33	4 30	7 30	2 42	6 33	4 34	7 26	2 45	4 53	7 7	2 53	5 33
15	Tuesday	23 20 59	4 24	7 36	3 8	10 18	4 30	7 30	3 12	7 18	4 34	7 26	3 15	4 53	7 7	3 27	6 18
16	Wednesday	23 23 6	4 24	7 36	3 41	10 56	4 30	7 31	3 46	7 56	4 34	7 26	3 50	4 53	7 8	4 5	6 56
17	Thursday	23 24 48	4 24	7 37	sets.	11 34	4 30	7 31	sets.	8 34	4 34	7 27	sets.	4 53	7 8	sets.	7 34
18	Friday	23 26 5	4 25	7 37	8 42	morn	4 30	7 31	8 36	9 11	4 34	7 27	8 32	4 53	7 8	8 14	8 11
19	Saturday	23 26 57	4 25	7 37	9 33	0 11	4 30	7 32	9 28	9 50	4 35	7 27	9 24	4 53	7 9	9 7	8 50
20	☾	23 27 25	4 25	7 38	10 17	0 50	4 30	7 32	10 13	10 29	4 35	7 28	10 9	4 54	7 9	9 54	9 29
21	Monday	23 27 28	4 25	7 38	10 56	1 29	4 31	7 32	10 52	11 10	4 35	7 28	10 50	4 54	7 9	10 37	10 10
22	Tuesday	23 27 6	4 25	7 38	11 29	2 10	4 31	7 32	11 27	11 54	4 35	7 28	11 25	4 54	7 9	11 16	10 54
23	Wednesday	23 26 19	4 26	7 38	12 0	2 54	4 31	7 32	11 59	morn	4 35	7 28	11 58	4 54	7 9	11 53	11 42
24	Thursday,	23 25 7	4 26	7 38	morn	3 42	4 31	7 33	morn	0 42	4 36	7 28	morn	4 55	7 10	morn	morn
25	Friday	23 23 30	4 26	7 38	0 28	4 40	4 32	7 33	0 29	1 40	4 36	7 28	0 29	4 55	7 10	0 28	0 40
26	Saturday	23 21 29	4 26	7 38	0 57	5 43	4 32	7 33	0 58	2 43	4 36	7 28	0 59	4 55	7 10	1 2	1 43
27	☾	23 19 3	4 27	7 38	1 27	6 54	4 32	7 33	1 29	3 54	4 37	7 28	1 32	4 56	7 10	1 39	2 54
28	Monday	23 16 13	4 27	7 38	2 0	7 55	4 33	7 33	2 4	4 55	4 37	7 28	2 7	4 56	7 10	2 18	3 55
29	Tuesday	23 12 58	4 28	7 38	2 38	9 0	4 33	7 33	2 43	6 0	4 38	7 28	2 47	4 56	7 10	3 2	5 0
30	Wednesday	23 9 19	4 28	7 38	3 22	10 0	4 34	7 33	3 28	7 0	4 38	7 28	3 33	4 57	7 10	3 51	6 0

MICHIGAN SOD AND SUB-SOIL PLOW.

This is a very valuable plow for certain purposes, especially for alluvial, or other deep soil, where it is wished to reverse the soil, by burying the surface and bringing the sub-soil, more or less to the top. A special premium, equal to the highest offered, was awarded to this plow at the trial of the New-York State Agricultural Society in June, 1850. The committee, in their report, spoke of it as follows:—"It is particularly useful where *trench* plowing is required; that is, where it is wished to bring the subsoil or a portion of it to the surface. This is a useful operation where the sub-soil abounds with vegetable food in a greater proportion than the surface soil; as on alluvial and other very deep soils, where the upper stratum has been exhausted by cultivation. It is also exceedingly valuable for ordinary *stiff* adhesive soils, the greatest defect of which is their tendency to pack too closely. This defect is in a great degree obviated by the manner in which this plow performs its work. It cuts its furrow-slice in two parts, horizontally, by which operation it makes twice as much division of the soil as is effected by an ordinary plow when going at the same depth and width, and from the fact that each part is turned over by itself, it falls lightly, and remains in a pulverized state."



SELECTING A WIFE.

The first requisites are the moral and religious qualities; and next and quite indispensible, an intellectual culture, industry, and knowledge of domestic economy. Ignorance of the latter, will always keep the house in any other than apple-pie order, although the printers might call it *pye*. A countryman married a city wife, whose chief occupation had been at parties and the piano;—on visiting the cow-yard, she earnestly inquired which cow gave *the buttermilk*. Another one directed her domestic to throw out all the milk which had stood over night, as it must be very bad, a yellow thick scum having risen on its surface. We knew of another who, when the plowman came in to ask her advice in the absence of her husband, as to what he should do when the plow was broken;—having *heard* of such an implement as a *cart*, advised him to use that instead. City girls are not always thus ignorant, for some of our acquaintance are the best managers of country establishments we ever knew; and on the other hand, many country girls, disdaining what is useful, and courting what is frivolous, scarcely know a gravy-dish from a griddle, or a churn from a cheese-press. The sum of the whole matter is, those who are determined to be intelligent and useful, will not fail to accomplish their desire; and those who are not, will not be sought by a wise young man.

Hydraulic Ram.—J. J. Conet states in Moore's New Yorker, that he erected a water-ram which sends water 62 rods, at the rate of 15 gallons per hour, to his house and barns, elevating it 100 feet.

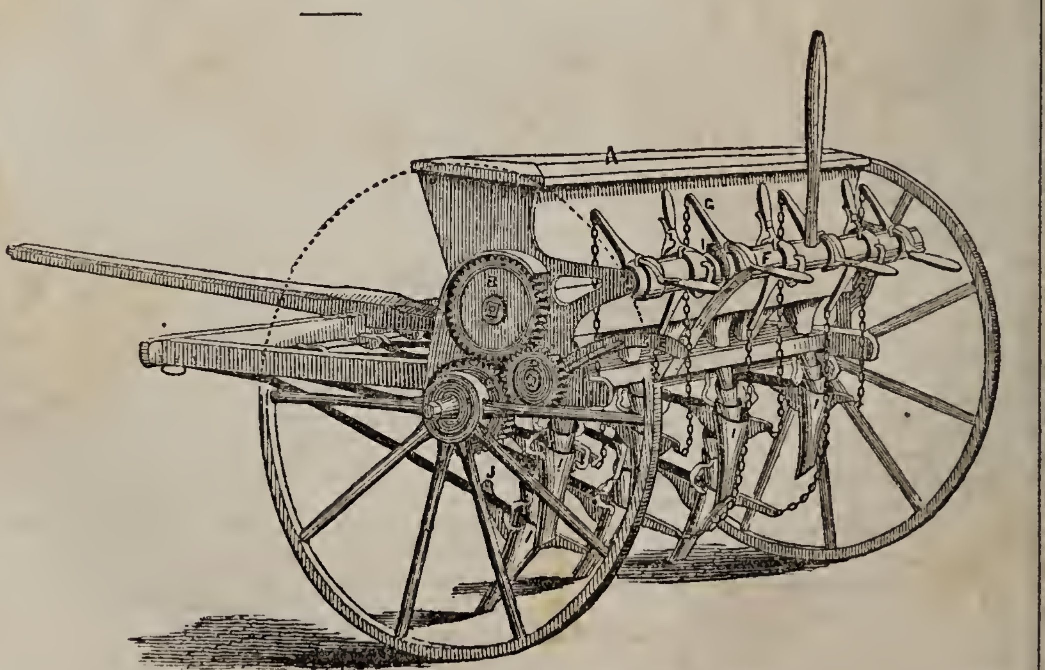
7th Month. **JULY, 1852.** **31 Days.**

MOON'S PHASES.	BOSTON.	NEW-YORK.	BALTIM'RE.	CHARLES'N.	SUN ON MERIDIAN.
	D. H. M.	H. M.	H. M.	H. M.	D. H. M. S.
Full Moon.....	1 10 44 mo.	10 32 mo.	10 21 mo.	10 8 mo	1 0 3 33
Third Quarter.	9 3 22 mo.	3 10 mo.	2 59 mo.	2 46 mo.	9 0 4 54
New Moon....	16 11 31 ev.	11 19 ev.	11 8 ev.	10 55 ev.	17 0 5 50
First Quarter..	23 8 18 ev.	8 6 ev.	7 55 ev.	7 42 ev.	25 0 6 12
Full Moon.....	30 9 28 ev.	9 16 ev.	9 5 ev.	8 52 ev.	

Hay harvest is commenced in earnest. If the crop is lodged down, do not wait for it to get into a riper stage—it will lose at bottom more than it will gain at top. Clover and all coarse hay should be made chiefly in cock. Stil keep an eye to the weeds. Mow Canada thistles *close to the ground*, while in blossom.

Day of Month.	Day of Week.	Sun's decl'n N.	CALENDAR For Boston, New England, New-York State, Michigan, Wisconsin, and Iowa.				CALENDAR For New-York City, Philadelphia, Conn., New-Jersey, Pennsyl'a, Ohio, Indiana, and Illinois.				CALENDAR For Baltimore, Virginia, Kentucky, and Missouri.			CALENDAR For Charleston, N. Carolina, Tenn., Georgia Alabama, Mississippi, and Louisiana.			
			Sun rises	Sun sets.	Moon rises.	H. W. Boston	Sun rises.	Sun sets.	Moon rises.	H. W. N. Y'k	Sun rises	Sun sets.	Moon rises	Sun rises.	Sun sets.	Moon rises.	H. W. Chl'tn.
		° ′ ″	H.M.	H.M.	H. M.	H. M.	H.M.	H.M.	H. M.	H. M.	H.M.	H.M.	H. M.	H.M.	H.M.	H. M.	H. M.
1	Thursday......	23 5 15	4 29	7 38	rises.	10 54	4 34	7 33	rises.	7 54	4 39	7 28	rises.	4 57	7 10	rises.	6 54
2	Friday.........	23 0 48	4 29	7 38	8 52	11 44	4 35	7 32	8 47	8 44	4 39	7 28	8 43	4 57	7 10	8 25	7 44
3	Saturday.......	22 55 56	4 30	7 38	9 35	ev 33	4 35	7 32	9 30	9 33	4 40	7 28	9 27	4 58	7 10	9 11	8 33
4	☾	22 50 40	4 30	7 38	10 10	1 15	4 36	7 32	10 7	10 15	4 40	7 28	10 4	4 58	7 10	9 51	9 15
5	Monday........	22 45 0	4 31	7 37	10 40	1 56	4 36	7 32	10 38	10 56	4 41	7 28	10 36	4 59	7 9	10 26	9 56
6	Tuesday.......	22 38 57	4 32	7 37	11 6	2 38	4 37	7 32	11 5	11 38	4 41	7 27	11 4	4 59	7 9	10 57	10 38
7	Wednesday.....	22 32 31	4 32	7 37	11 30	3 19	4 38	7 31	11 30	ev 19	4 42	7 27	11 30	5 0	7 9	11 27	11 19
8	Thursday......	22 25 40	4 33	7 36	11 53	3 59	4 38	7 31	11 54	0 59	4 42	7 27	11 54	5 0	7 9	11 55	11 59
9	Friday........	22 18 27	4 34	7 36	morn	4 45	4 39	7 31	morn	1 45	4 43	7 26	morn	5 1	7 9	morn	ev 45
10	Saturday.......	22 10 50	4 34	7 35	0 17	5 35	4 40	7 30	0 18	2 35	4 44	7 26	0 19	5 1	7 8	0 23	1 35
11	☾	22 2 51	4 35	7 35	0 41	6 37	4 40	7 30	0 44	3 37	4 44	7 26	0 46	5 2	7 8	0 53	2 37
12	Monday........	21 54 29	4 36	7 34	1 8	7 37	4 41	7 29	1 12	4 37	4 45	7 25	1 15	5 2	7 8	1 25	3 37
13	Tuesday.......	21 45 44	4 37	7 34	1 39	8 39	4 42	7 29	1 44	5 39	4 46	7 25	1 47	5 3	7 8	2 1	4 39
14	Wednesday.....	21 36 37	4 37	7 33	2 16	9 37	4 42	7 28	2 22	6 37	4 46	7 24	2 26	5 3	7 7	2 42	5 37
15	Thursday......	21 27 7	4 38	7 33	3 0	10 25	4 43	7 28	3 6	7 25	4 47	7 24	3 11	5 4	7 7	3 29	6 25
16	Friday........	21 17 17	4 39	7 32	sets.	11 12	4 44	7 27	sets.	8 12	4 48	7 23	sets.	5 5	7 6	sets.	7 12
17	Saturday.......	21 7 3	4 40	7 31	8 14	11 54	4 45	7 26	8 9	8 54	4 49	7 23	8 6	5 5	7 6	7 50	7 54
18	☾	20 56 29	4 41	7 31	8 55	morn	4 46	7 26	8 52	9 36	4 49	7 22	8 49	5 6	7 5	8 35	8 36
19	Monday........	20 45 34	4 42	7 30	9 31	0 36	4 46	7 25	9 29	10 17	4 50	7 21	9 26	5 7	7 5	9 17	9 17
20	Tuesday.......	20 34 17	4 42	7 29	10 3	1 17	4 47	7 24	10 2	10 58	4 51	7 21	10 0	5 7	7 4	9 54	9 58
21	Wednesday.....	20 22 40	4 43	7 28	10 32	1 58	4 48	7 23	10 32	11 43	4 52	7 20	10 32	5 8	7 4	10 30	10 43
22	Thursday......	20 10 42	4 44	7 27	11 1	2 43	4 49	7 23	11 2	morn	4 53	7 19	11 3	5 8	7 3	11 4	11 28
23	Friday........	19 58 24	4 45	7 27	11 30	3 28	4 50	7 22	11 32	0 28	4 53	7 18	11 34	5 9	7 3	11 40	morn
24	Saturday.......	19 45 46	4 46	7 26	morn	4 19	4 51	7 21	morn	1 19	4 54	7 17	morn	6 10	7 2	morn	0 19
25	☾	19 32 48	4 47	7 25	0 1	5 15	4 52	7 20	0 5	2 15	4 55	7 17	0 7	5 10	7 2	0 17	1 15
26	Monday........	19 19 31	4 48	7 24	0 36	6 18	4 53	7 19	0 41	3 18	4 56	7 16	0 45	5 11	7 1	0 58	2 18
27	Tuesday.......	19 5 55	4 49	7 23	1 17	7 29	4 53	7 18	1 23	4 29	4 57	7 15	1 27	5 12	7 0	1 44	3 29
28	Wednesday....	18 51 59	4 50	7 22	2 5	8 42	4 54	7 17	2 11	5 42	4 58	7 14	2 16	5 12	6 59	2 35	4 42
29	Thursday......	18 37 45	4 51	7 21	3 0	9 50	4 55	7 16	3 6	6 50	4 59	7 13	3 11	5 13	6 59	3 31	5 50
30	Friday........	18 23 13	4 52	7 20	rises.	10 50	4 56	7 15	rises.	7 50	4 59	7 12	rises.	5 14	6 58	rises.	6 50
31	Saturday.......	18 8 24	4 53	7 18	8 8	11 28	4 57	7 14	8 4	8 38	5 0	7 11	8 1	5 14	6 57	7 47	7 38

GRAIN DRILL.



The use of the grain drill is constantly increasing in this country. Its advantages may be thus enumerated: 1. It saves seed; 2. It distributes the seeds with greater regularity than it can be done by hand; 3. It deposits the seed at any desired depth, and insures speedy germination; 4. It affords an opportunity to destroy weeds which infest the crop; 5. The crop receives the undivided benefit of the soil; 6. By the admission of air between the rows, a stronger plant is produced and a heavier crop is obtained; 7. In reference to wheat and other grain, the crop is less liable to blight or mildew; 8. Fertilizing substances may be deposited with the seed, by which the crop is more largely benefitted than it can be by any other mode of using manures; 9. It protects grain against winter-killing. The machine here represented is made by Bickford & Huffman, Macedon, Wayne county, N. Y.

8th Month. **AUGUST, 1852.** 31 Days.

MOON'S PHASES.	BOSTON.	NEW-YORK.	BALTIM'RE.	CHARLES'N.	SUN ON MERIDIAN.
	D. H. M.	H. M.	H. M.	H. M.	D. H. M. S.
Third Quarter.	7 8 43 ev.	8 31 ev.	8 20 ev.	8 7 ev.	1 0 5 59
New Moon....	15 9 14 mo.	9 2 mo.	8 51 mo.	8 38 mo.	9 0 5 9
First Quarter..	22 1 18 mo.	1 6 mo.	0 55 mo.	0 42 mo.	17 0 3 43
Full Moon.....	29 10 22 mo.	10 10 mo.	9 59 mo.	9 46 mo.	25 0 1 45

Finish harvesting wheat, oats, and barley. Sow flat turneps any time before the 10th of the month. Work over fallows. Drain wet lands. Dig muck. Build stone-walls. Wheat and barley designed for the autumn market, should be threshed as soon as sufficiently dry to escape heating.

Day of Month.	Day of Week.	Sun's decl'n N.	CALENDAR For Boston, New England, New-York State, Michigan, Wisconsin, and Iowa.				CALENDAR For New-York City, Philadelphia, Conn., New-Jersey, Pennsyl'a, Ohio, Indiana, and Illinois.				CALENDAR For Baltimore, Virginia, Kentucky, and Missouri.			CALENDAR For Charleston, N. Carolina, Tenn., Georgia. Alabama, Mississippi, and Louisiana.			
			Sun rises.	Sun sets.	Moon rises.	H. W. Boston	Sun rises.	Sun sets.	Moon rises.	H W. N. Y'k	Sun rises	Sun sets.	Moon rises	Sun rises.	Sun sets.	Moon rises.	H. W. Chl'tn.
		° ′ ″	H.M.	H.M.	H. M.	H. M.	H.M.	H.M.	H. M.	H. M.	H.M.	H.M.	H. M.	H.M.	H.M.	H. M.	H. M.
1	C	17 53 15	4 54	7 17	8 40	ev 23	4 58	7 13	8 37	9 23	5 1	7 10	8 34	5 15	6 56	8 23	8 23
2	Monday........	17 37 50	4 55	7 16	9 7	1 2	4 59	7 12	9 5	10 2	5 2	7 9	9 4	5 16	6 56	8 56	9 2
3	Tuesday	17 22 7	4 56	7 15	9 32	1 36	5 0	7 11	9 32	10 36	5 3	7 8	9 31	5 16	6 55	9 26	9 36
4	Wednesday.....	17 6 8	4 57	7 14	9 56	2 12	5 1	7 10	9 56	11 12	5 4	7 7	9 56	5 17	6 54	9 55	10 12
5	Thursday	16 49 51	4 58	7 13	10 19	2 47	5 2	7 9	10 20	11 47	5 5	7 6	10 21	5 18	6 53	10 23	10 47
6	Friday	16 33 19	4 59	7 11	10 43	3 22	5 3	7 8	10 45	ev 22	5 6	7 5	10 47	5 18	6 52	10 52	11 22
7	Saturday.......	16 16 30	5 0	7 10	11 8	3 59	5 4	7 6	11 11	0 59	5 7	7 4	11 14	5 19	6 51	11 23	11 59
8	C	15 59 25	5 1	7 9	11 37	4 39	5 5	7 5	11 41	1 39	5 8	7 2	11 45	5 20	6 50	11 57	ev 39
9	Monday........	15 42 5	5 2	7 7	morn	5 28	5 6	7 4	morn	2 28	5 9	7 1	morn	5 21	6 49	morn	1 28
10	Tuesday	15 24 30	5 3	7 6	0 11	6 36	5 7	7 3	0 16	3 36	5 9	7 0	0 20	5 21	6 48	0 36	2 36
11	Wednesday.....	15 6 40	5 4	7 5	0 51	7 48	5 8	7 1	0 57	4 48	5 10	6 59	1 2	5 22	6 47	1 19	3 48
12	Thursday	14 48 35	5 5	7 3	1 40	9 1	5 9	7 0	1 46	6 1	5 11	6 57	1 51	5 23	6 46	2 10	5 1
13	Friday	14 30 16	5 6	7 2	2 37	10 1	5 10	6 59	2 43	7 1	5 12	6 56	2 48	5 23	6 45	3 7	6 1
14	Saturday.......	14 11 43	5 7	7 1	3 42	10 52	5 11	6 57	3 47	7 52	5 13	6 55	3 52	5 24	6 44	4 10	6 52
15	C	13 52 57	5 8	6 59	sets.	11 38	5 12	6 56	sets.	8 38	5 14	6 54	sets.	5 25	6 43	sets.	7 38
16	Monday........	13 33 58	5 10	6 58	8 3	morn	5 13	6 55	8 1	9 20	5 15	6 52	7 59	5 25	6 42	7 52	8 20
17	Tuesday	13 14 44	5 11	6 56	8 34	0 20	5 14	6 53	8 33	10 1	5 16	6 51	8 33	5 26	6 41	8 29	9 1
18	Wednesday.....	12 55 20	5 12	6 55	9 3	1 1	5 15	6 52	9 4	10 42	5 17	6 50	9 4	5 27	6 40	9 5	9 42
19	Thursday	12 35 42	5 13	6 53	9 32	1 42	5 16	6 50	9 34	11 23	5 18	6 48	9 36	5 27	6 39	9 40	10 23
20	Friday	12 15 52	5 14	6 52	10 3	2 23	5 17	6 49	10 6	morn	5 19	6 47	10 9	5 28	6 38	10 18	11 8
21	Saturday.......	11 55 51	5 15	6 50	10 37	3 8	5 18	6 47	10 41	0 8	5 20	6 45	10 45	5 29	6 36	10 58	11 53
22	C	11 35 39	5 16	6 49	11 16	3 53	5 19	6 46	11 21	0 53	5 21	6 44	11 25	5 29	6 35	11 42	morn
23	Monday........	11 15 15	5 17	6 47	morn	4 44	5 20	6 44	morn	1 44	5 21	6 43	morn	5 30	6 34	morn	0 44
24	Tuesday	10 54 41	5 18	6 45	0 1	5 49	5 20	6 43	0 7	2 49	5 22	6 41	0 12	5 31	6 33	0 31	1 49
25	Wednesday	10 33 57	5 19	6 44	0 53	7 7	5 21	6 41	0 59	4 7	5 23	6 40	1 5	5 31	6 32	1 24	3 7
26	Thursday	10 13 3	5 20	6 42	1 51	8 33	5 22	6 40	1 57	5 33	5 24	6 38	2 2	5 32	6 31	2 22	4 33
27	Friday	9 51 59	5 21	6 41	2 53	9 46	5 23	6 38	2 59	6 46	5 25	6 37	3 4	5 33	6 29	3 21	5 46
28	Saturday.......	9 30 46	5 22	6 39	3 58	10 42	5 24	6 37	4 3	7 42	5 26	6 35	4 7	5 33	6 28	4 21	6 42
29	C	9 9 23	5 23	6 37	rises.	11 27	5 25	6 35	rises.	8 27	5 27	6 34	rises.	5 34	6 27	rises.	7 27
30	Monday	8 47 52	5 24	6 36	7 35	ev 7	5 26	6 34	7 33	9 7	5 28	6 32	7 32	5 35	6 26	7 27	8 7
31	Tuesday	8 26 12	5 25	6 34	7 59	0 39	5 27	6 32	7 58	9 39	5 29	6 31	7 58	5 35	6 24	7 56	8 39

LAYING OUT KITCHEN GARDENS.

A great saving may be effected in the cost of *cultivating* kitchen gardens by the use of the plow and cultivator, wherever they can be so laid out as to admit the labor of a horse.

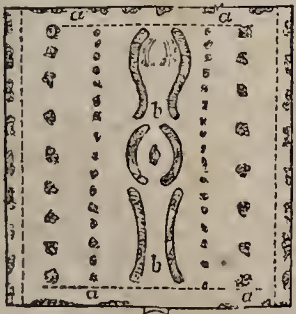


Fig. 1.—Kitchen Garden for horse culture.

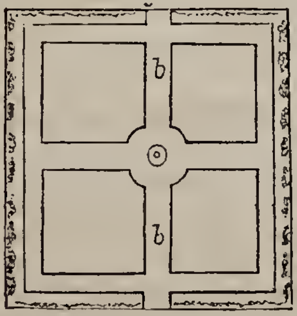


Fig. 2.—Kitchen Garden laid out into quarters.

In the above figure (Fig. 1), we have endeavored to show an arrangement for this purpose, where dwarf fruit trees, currant and gooseberry bushes, &c., are planted in continuous rows across the garden; the crops of vegetables being planted between, and the whole cultivated by a horse, which turns about at the ends on the spaces or alleys, *a*, *a*. The flower garden and ornamental part occupy a strip at the centre, on each side of the alley, *b*, *b*. If desired, this part may be wholly omitted. Fig. 2, shows the more common way of laying out kitchen gardens into *quarters*, where, it will be observed, horse labor can not be introduced.

There are a few of the smaller vegetables, as radishes, lettuce, &c., which can not well be worked with plow and cultivator. For such, it is best to have one single narrow bed extending across the garden. For many of the larger vegetables, the space allotted to the improved mode will give a better growth than the common way of planting them in thick beds. For example, asparagus, when thus given plenty of space, will attain more than double the growth acquired with ordinary cultivation.

Grafting Grape Vines—The following is the mode practiced by the late Mr. Herbemont, of South Carolina: "Take away the earth around the vine, to the depth of four or five inches—saw it off about two or three inches below the surface of the ground. Split it with a knife or chisel, and having tapered the lower end of the scion in the shape of a wedge, insert it in the cleft stock, so as to make the bark of both coincide, (which perhaps is not necessary with the vine;) tie it with any kind of string merely to keep the scion in its place, so as to leave only one bud of the graft above the ground, and the other just below the surface, and it is done."

Relief of Choked Cattle.—The best method and easiest, is to take a lump of lard (cold,) about the size of a hen's egg, and a spoonful of powder mixed with it, and haul out the tongue and throw it into the throat; let the tongue go back, and they are relieved in one minute.

9th Month. **SEPTEMBER, 1852.** **30 Days.**

MOON'S PHASES.	BOSTON.	NEW-YORK.	BALTIM'RE.	CHARLES'N.	SUN ON MERIDIAN.
	D. H. M.	H. M.	H. M.	H. M.	D. H. M. S.
Last Quarter..	6 1 50 ev.	1 38 ev.	1 27 ev.	1 14 ev.	1 11 59 40
New Moon	13 5 54 ev.	5 42 ev.	5 31 ev.	5 18 ev.	9 11 57 2
First Quarter..	20 8 33 mo.	8 21 mo.	8 10 mo.	7 57 mo.	17 11 54 14
Full Moon.....	28 1 41 mo.	1 29 mo.	1 18 mo.	1 5 mo.	25 11 51 27

Plow for wheat. Clover leys on mellow soil, will only need one plowing, but that should be done well. Fallows should be cleaned of all foul plants before the wheat is sown. Sow wheat and rye from the middle to the last of the month. Second crop hay should be cut.

Day of Month.	Day of Week.	Sun's decl'n N.	CALENDAR For Boston, New-England, New-York State, Michigan, Wisconsin, and Iowa.				CALENDAR For New-York City, Philadelphia, Conn., New-Jersey, Pennsyl'a, Ohio, Indiana, and Illinois.				CALENDAR For Baltimore, Virginia, Kentucky, and Missouri.			CALENDAR For Charleston, N. Carolina, Tenn., Georgia, Alabama, Mississippi, and Louisiana.			
			Sun rises.	Sun sets.	Moon rises.	H. W. Boston	Sun rises.	Sun sets.	Moon rises.	H. W. N. Y'k	Sun rises.	Sun sets.	Moon rises	Sun rises.	Sun sets.	Moon rises.	H. W. Ch'ton
		° ′ ″	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
1	Wednesday	8 4 25	5 26	6 32	8 21	1 12	5 28	6 30	8 22	10 12	5 30	6 29	8 23	5 36	6 23	8 24	9 12
2	Thursday, ...	7 42 29	5 28	6 30	8 44	1 43	5 29	6 29	8 46	10 43	5 31	6 27	8 48	5 36	6 22	8 52	9 43
3	Friday..........	7 20 26	5 29	6 29	9 9	2 14	5 30	6 27	9 12	11 14	5 32	6 26	9 14	5 37	6 20	9 22	10 14
4	Saturday	6 58 15	5 30	6 27	9 36	2 44	5 31	6 26	9 40	11 44	5 32	6 24	9 43	5 38	6 19	9 55	10 44
5	C	6 35 58	5 31	6 25	10 7	3 17	5 32	6 24	10 12	ev 17	5 33	6 23	10 16	5 38	6 18	10 31	11 17
6	Monday.........	6 13 34	5 32	6 24	10 44	3 52	5 33	6 22	10 50	0 52	5 34	6 21	10 54	5 39	6 17	11 11	11 52
7	Tuesday	5 51 4	5 33	6 22	11 28	4 36	5 34	6 21	11 34	1 36	5 35	6 20	11 39	5 40	6 15	11 58	ev 36
8	Wednesday	5 28 28	5 34	6 20	morn	5 38	5 35	6 19	morn	2 38	5 36	6 18	morn	5 40	6 14	morn	1 38
9	Thursday	5 5 46	5 35	6 19	0 20	7 3	5 36	6 17	0 26	4 3	5 37	6 16	0 32	5 41	6 13	0 51	3 3
10	Friday..........	4 42 59	5 36	6 17	1 21	8 27	5 37	6 16	1 27	5 27	5 38	6 15	1 32	5 42	6 11	1 50	4 27
11	Saturday.......	4 20 7	5 37	6 15	2 28	9 38	5 38	6 12	2 34	6 38	5 39	6 13	2 38	5 42	6 10	2 55	5 38
12	C	3 57 10	5 38	6 13	3 41	10 33	5 39	6 11	3 46	7 33	5 40	6 12	3 49	5 43	6 9	4 2	6 33
13	Monday.........	3 34 8	5 39	6 12	sets.	11 16	5 40	6 11	sets.	8 16	5 41	6 10	sets.	5 44	6 7	sets.	7 16
14	Tuesday	3 11 3	5 40	6 10	7 2	11 58	5 41	6 9	7 2	8 58	5 41	6 8	7 2	5 44	6 6	7 1	7 58
15	Wednesday	2 47 54	5 41	6 8	7 31	morn	5 42	6 7	7 33	9 38	5 42	6 7	7 34	5 45	6 5	7 37	8 38
16	Thursday	2 24 43	5 42	6 6	8 1	0 38	5 43	6 6	8 5	10 19	5 43	6 5	8 7	5 45	6 3	8 15	9 19
17	Friday..........	2 1 28	5 43	6 5	8 36	1 19	5 44	6 4	8 40	11 2	5 44	6 4	8 43	5 46	6 2	8 55	10 2
18	Saturday.......	1 38 11	5 44	6 3	9 14	2 2	5 45	6 2	9 19	11 45	5 45	6 2	9 23	5 47	6 1	9 39	10 45
19	C	1 14 52	5 45	6 1	9 58	2 45	5 46	6 1	10 4	morn	5 46	6 0	10 9	5 47	5 59	10 27	11 29
20	Monday.........	0 51 31	5 47	5 59	10 48	3 29	5 47	5 59	10 55	0 29	5 47	5 59	11 0	5 48	5 58	11 20	morn
21	Tuesday	0 28 8	5 48	5 57	11 45	4 19	5 48	5 57	11 51	1 19	5 48	5 57	11 56	5 49	5 56	morn	0 19
22	Wednesday	N. 4 45	5 49	5 56	morn	5 25	5 49	5 56	morn	2 25	5 49	5 55	morn	5 49	5 55	0 16	1 25
23	Thursday, ...	S. 18 40	5 50	5 54	0 46	6 54	5 50	5 54	0 52	3 54	5 50	5 54	0 57	5 50	5 54	1 15	2 54
24	Friday..........	0 42 5	5 51	5 52	1 49	8 23	5 51	5 52	1 55	5 23	5 51	5 52	1 59	5 51	5 52	2 15	4 23
25	Saturday.......	1 5 30	5 52	5 50	2 53	9 37	5 52	5 50	2 57	6 37	5 52	5 51	3 1	5 51	5 51	3 13	5 37
26	C	1 28 54	5 53	5 48	3 56	10 27	5 53	5 49	3 59	7 27	5 53	5 49	4 1	5 52	5 50	4 11	6 27
27	Monday.........	1 52 18	5 54	5 47	rises.	11 7	5 54	5 47	rises.	8 7	5 54	5 47	rises.	5 53	5 48	rises.	7 7
28	Tuesday	2 15 41	5 55	5 45	6 25	11 41	5 55	5 45	6 26	8 41	5 55	5 46	6 26	5 53	5 47	6 26	7 41
29	Wednesday	2 39 3	5 56	5 43	6 48	ev 12	5 56	5 44	6 49	9 12	5 56	5 44	6 51	5 54	5 46	6 54	8 12
30	Thursday......	3 2 24	5 58	5 41	7 12	0 42	5 57	5 42	7 14	9 42	5 57	5 42	7 16	5 55	5 44	7 23	8 42

DOMESTIC FOWLS IN WINTER.

One of the greatest errors that prevails in the management of the domestic fowl, and one which must be destructive of all profit, is the common practice of leaving them to "shirk for themselves," during the winter months. There is no animal on the farm that better repays good keeping than the hen, and with it, there is none that affords so much profit on the capital employed. The hen should have a close warm roost, for there are few creatures that suffer more from the cold than fowls; they should have a box of gravel, sand, ashes, &c., for them to roll and dust themselves in, to prevent the attacks of those insects to which fowls are subject; they should have access to pulverized limestones or limestone gravel, as this will give material for shell, and contribute to the health of hens; they should have abundance of water, clean and pure, for few animals will drink more frequently or eagerly than hens, if water is within their reach; and no one need expect healthly fowls, or a plentiful supply of eggs, who does not pay strict attention to their supply of food. Indian corn, peas, buckwheat, oats, or barley, may be fed to fowls. Potatoes steamed or boiled, are excellent food for them, but must be fed while warm, as fowls will not eat cold potatoe, unless driven to it by hunger. Fowls should have access to a warm yard in the sunny days of winter as warmth is particularly invigorating to them. If confined for any time in a close ill ventilated room, they will become diseased and feeble, and will require extra attention to repair the evil generated.

Sheep Poisoned by Peach Leaves.—The poisonous quality of the leaves of the wild cherry, has been long known, and cattle and sheep have frequently lost their lives by eating them. The substance which produces these effects, is supposed to be prussic acid. Peach leaves are known to contain this acid, and a writer in the *Wood-Grower* states that two sheep had died from eating freely of peach leaves. Various remedies have been given for the relief of animals which have eaten poisonous substances. In regard to sheep and cattle, we have formerly experienced good success from giving as soon as the illness of the animal is discovered, sweet-oil, lard, or butter, mixed with salt. For a sheep, a gill of oil, with a table-spoonful of fine salt, was the quantity given. A cow might have four times that quantity. It is very important that the dose be given as soon as the symptoms of poisoning are manifest; the longer it is delayed, the less likely it will be to afford relief.

Remedy for Plum Knots.—The old fashioned remedy "*to cut and keep cutting*," still proves infallible. Unfortunately, it is very rarely applied, even by those who think they have given it a fair trial. Perhaps the disease has been permitted to advance for two or three months before it has even excited attention. The knife is then made use of, and a single operation is regarded enough. No wonder that a remedy, applied in such a burlesque manner, should be considered inefficient. We observe that the application of copperas water to the wounds made by the excision of the knots on the larger branches, is spoken of highly by different cultivators.

10th Month. **OCTOBER, 1852.** **31 Days.**

MOON'S PHASES.	BOSTON.	NEW-YORK.	BALTIM'RE.	CHARLES'N.	SUN ON MERIDIAN.
	D. H. M.	H. M.	H. M.	H. M.	D. H. M. S.
Third Quarter.	6 5 52 mo.	5 40 mo.	5 29 mo.	5 16 mo.	1 11 49 29
New Moon....	13 2 30 mo.	2 18 mo.	2 7 mo.	1 54 mo	9 11 47 9
First Quarter..	19 7 12 ev.	7 0 ev.	6 49 ev.	6 36 ev.	17 11 45 19
Full Moon.....	27 7 10 ev.	6 58 ev.	6 47 ev.	6 34 ev.	25 11 44 8

Dig potatoes; do not put them in too large piles in the cellar at first; they are apt to heat, which increases the tendency to rot.—Put hogs to fattening, and feed them all they will eat. Gather pumpkins before hard frosts, and feed them to milch cows and fatting stock every day

Day of Month.	Day of Week.	Sun's decl'n S.	CALENDAR For Boston, New-England, New-York State, Michigan, Wisconsin, and Iowa.				CALENDAR For New-York City, Philadelphia, Conn, New-Jersey, Pennsyl'a, Ohio, Indiana, and Illinois.				CALENDAR For Baltimore, Virginia, Kentucky, and Missouri.			CALENDAR For Charleston, N. Carolina, Tenn., Georgia. Alabama, Mississippi, and Louisiana.			
			Sun rises	Sun sets.	Moon rises.	H. W. Boston	Sun rises	Sun sets.	Moon rises.	H W. N. Y'k	Sun rises.	Sun sets.	Moon rises.	Sun rises.	Sun sets.	Moon rises.	H. W. Chl'tn.
		° ′ ″	H.M.	H.M.	H. M.	H. M.	H.M.	H.M.	H. M.	H. M.	H.M.	H.M.	H. M.	H.M.	H.M.	H. M.	H. M.
1	Friday	3 25 42	5 59	5 40	7 39	1 12	5 58	5 40	7 42	10 12	5 58	5 41	7 45	5 55	5 43	7 55	9 12
2	Saturday........	3 48 58	6 0	5 38	8 7	1 41	5 59	5 39	8 11	10 41	5 59	5 39	8 15	5 56	5 42	8 29	9 41
3	C	4 12 12	6 1	5 36	8 41	2 9	6 0	5 37	8 46	11 9	5 59	5 38	8 51	5 57	5 40	9 7	10 9
4	Monday........	4 35 22	6 2	5 34	9 21	2 42	6 1	5 35	9 27	11 42	6 0	5 36	9 31	5 58	5 39	9 50	10 42
5	Tuesday	4 58 30	6 3	5 33	10 9	3 18	6 2	5 34	10 15	ev 18	6 1	5 35	10 20	5 58	5 38	10 40	11 18
6	Wednesday.....	5 21 34	6 4	5 31	11 4	4 2	6 3	5 32	11 11	1 2	6 2	5 33	11 16	5 59	5 37	11 35	ev 2
7	Thursday	5 44 34	6 5	5 29	morn	5 2	6 4	5 31	morn	2 2	6 3	5 31	morn	6 0	5 35	morn	1 2
8	Friday	6 7 29	6 7	5 28	0 7	6 28	6 5	5 29	0 13	3 28	6 4	5 30	0 18	6 0	5 34	0 35	2 28
9	Saturday.......	6 30 20	6 8	5 26	1 16	7 59	6 6	5 27	1 21	4 59	6 5	5 28	1 25	6 1	5 33	1 40	3 59
10	C	6 53 6	6 9	5 24	2 29	9 15	6 7	5 26	2 33	6 15	6 6	5 27	2 36	6 2	5 32	2 47	5 15
11	Monday........	7 15 47	6 10	5 23	3 45	10 5	6 9	5 24	3 47	7 5	6 7	5 25	3 49	6 3	5 30	3 56	6 5
12	Tuesday	7 38 22	6 11	5 21	sets.	10 49	6 10	5 23	sets.	7 49	6 8	5 24	sets.	6 3	5 29	sets.	6 49
13	Wednesday.....	8 0 49	6 12	5 19	5 58	11 31	6 11	5 21	6 0	8 31	6 9	5 22	6 2	6 4	5 28	6 7	7 31
14	Thursday	8 23 11	6 14	5 18	6 31	morn	6 12	5 20	6 34	9 11	6 11	5 21	6 37	6 5	5 27	6 47	8 11
15	Friday	8 45 26	6 15	5 16	7 8	0 11	6 13	5 18	7 12	9 56	6 12	5 19	7 16	6 6	5 25	7 30	8 56
16	Saturday.......	9 7 33	6 16	5 15	7 50	0 56	6 14	5 16	7 56	10 37	6 13	5 18	8 1	6 6	5 24	8 18	9 37
17	C	9 29 31	6 17	5 13	8 40	1 37	6 15	5 15	8 46	11 22	6 14	5 16	8 52	6 7	5 23	9 11	10 22
18	Monday........	9 51 22	6 18	5 11	9 36	2 22	6 16	5 13	9 43	morn	6 15	5 15	9 48	6 8	5 22	10 9	11 7
19	Tuesday	10 13 5	6 19	5 10	10 37	3 7	6 17	5 12	10 44	0 7	6 16	5 14	10 49	6 9	5 21	11 8	12 0
20	Wednesday	10 34 38	6 21	5 8	11 41	4 0	6 18	5 11	11 47	1 0	6 17	5 12	11 51	6 10	5 20	morn	morn
21	Thursday......	10 56 1	6 22	5 7	morn	5 5	6 20	5 9	morn	2 5	6 18	5 11	morn	6 10	5 19	0 8	1 5
22	Friday	11 17 15	6 23	5 5	0 45	6 34	6 21	5 8	0 50	3 34	6 19	5 9	0 54	6 11	5 17	1 8	2 34
23	Saturday.......	11 38 18	6 24	5 4	1 48	8 2	6 22	5 6	1 52	5 2	6 20	5 8	1 55	6 12	5 16	2 5	4 2
24	C	11 59 10	6 26	5 2	2 50	9 13	6 23	5 5	2 53	6 13	6 21	5 7	2 55	6 13	5 15	3 1	5 13
25	Monday	12 19 51	6 27	5 1	3 50	10 1	6 24	5 3	3 52	7 1	6 22	5 5	3 53	6 14	5 14	3 56	6 1
26	Tuesday	12 40 22	6 28	4 59	4 50	10 41	6 25	5 2	4 50	7 41	6 23	5 4	4 50	6 14	5 13	4 50	6 41
27	Wednesday.....	13 0 39	6 29	4 58	rises.	11 12	6 27	5 1	rises.	8 12	6 24	5 3	rises.	6 15	5 12	rises.	7 12
28	Thursday	13 20 46	6 31	4 57	5 41	11 43	6 28	5 0	5 44	8 43	6 26	5 2	5 47	6 16	5 11	5 56	7 43
29	Friday..........	13 40 38	6 32	4 55	6 8	ev 12	6 29	4 58	6 13	9 12	6 27	5 0	6 16	6 17	5 10	6 2	8 12
30	Saturday.......	14 0 18	6 33	4 54	6 41	0 44	6 30	4 57	6 46	9 44	6 28	4 59	6 50	6 18	5 9	7 0	8 44
31	C	14 19 45	6 34	4 53	7 19	1 13	6 31	4 56	7 25	10 13	6 29	4 58	7 29	6 19	5 8	7 47	9 13

PULVERIZATION OF THE SOIL.

The fact that plants can only receive their food in a soluble state, cannot be too strongly impressed on the mind of the farmer. He should also be acquainted with the agencies which bring the crude elements into this state of solution. Hon. L. C. Ball, in an address before the Rensselaer County Agricultural Society, gave some good illustrations of this subject, in speaking of the "mechanical preparation of the soil." He explains the importance of this in reference to the preparation of soluble food for plants, and observes—"All these operations and results which I have endeavored to explain, take place no where else than upon the surface of the earth; *in the presence of light, heat, air, moisture and electric fluids;* subject to the separate influence of each, and exposed to the combined action of all. At that moderate distance below the surface, at which these influences cease to operate, all tendency to decomposition and decay, and all attempts at changes and alterations of form and substance, are arrested. The same elements are doubtless every where diffused, but they are locked up by the conditions of their original combination, and will so remain until brought to the surface, and their prison doors opened by some agent already free. Bury this piece of rock below the influence of heat and moisture, and unless thrown up by some convulsion of nature, it will remain there unchanged for ever. Place it upon a cultivated field, let it be turned by the plow, and exposed to the decomposing agents existing in the air and in the soil, until it is pulverized, and in a few years it will appear upon your table in some article of food, or upon your person in the garments you wear, or be sent to market in the form of beef and pork, and exchanged for tea and sugar, or silks and laces."

Number of Seeds in Given Weights.—Mr. Melvin stated in a late discussion at an English Farmers' Club, that after several trials he had found that

1 lb. of red clover of good quality gives, per acre, to each superficial foot,............	6¼	seeds.
1 lb. yellow clover, (*Medicago lupulina,*) ...	6	"
1 lb. white clover,..........................	16	"
1 lb. rye grass,.............................	5	"

But as a large number of the seeds sown do not vegetate, and many of the plants which come up die, it is necessary to sow much larger quantities than are specified; and Mr. M. recommends for an acre, 8 lbs. red clover, 2 lbs. white do., 2 lbs. yellow do., with one bushel of rye grass, which by his computation affords 100 seeds rye grass, 50 red clover, 32 white, and 12 yellow clover, per superficial foot. In this country, a good substitute for the rye grass, would be the same quantity of redtop per acre.

The Cherry Slug.—This larva, which eats the pulpy part of the leaf of the cherry, and sometimes of other fruit trees, is most effectually routed by a sprinkling of *lime.* Air-slacked lime, applied in the dew of the morning, usually accomplishes the desired purpose. Dry, water-slacked lime, taken fresh, is still better, being more caustic.

11th Month.

NOVEMBER, 1852.

30 Days.

MOON'S PHASES.	BOSTON.	NEW-YORK.	BALTIM'RE.	CHARLES'N.	SUN ON MERIDIAN.
	D. H. M.	H. M.	H. M.	H. M.	D. H. M. S.
Third Quarter.	4 7 57 ev.	7 45 ev.	7 34 ev.	7 21 ev.	1 11 43 42
New Moon....	11 11 57 mo.	11 45 mo.	11 34 mo.	11 21 mo.	9 11 44 2
First Quarter..	18 9 43 mo.	9 31 mo.	9 20 mo.	9 7 mo.	17 11 45 17
Full Moon.....	26 1 57 ev.	1 45 ev.	1 34 ev.	1 21 ev.	25 11 47 23

All vegetables not gathered before, should now be secured. Flat turneps should be fed out as fast as stock can eat them to advantage. Shelter milch cows every night, and all stock should be brought to the barn towards the last of the month. Fowls should be carefully fed and sheltered.

Day of Month.	Day of Week.	Sun's decl'n S.	CALENDAR For Boston, New-England, New-York State, Michigan, Wisconsin, and Iowa.				CALENDAR For New-York City, Philadelphia, Conn., New-Jersey, Pennsyl'a, Ohio, Indiana, and Illinois.				CALENDAR For Baltimore, Virginia, Kentucky, and Missouri.			CALENDAR For Charleston, N. Carolina, Tenn., Georgia, Alabama, Mississippi, and Louisiana.			
			Sun rises	Sun sets.	Moon rises.	H. W Boston	Sun rises.	Sun sets.	Moon rises.	H. W. N. Y'k	Sun rises.	Sun sets.	Moon rises.	Sun rises.	Sun sets.	Moon rises	H. W. Ch'ton
		° ′ ″	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
1	Monday	14 38 59	6 36	4 51	8 3	1 42	6 32	4 54	8 10	10 42	6 30	4 57	8 15	6 20	5 7	8 34	9 42
2	Tuesday	14 57 58	6 37	4 50	8 55	2 16	6 34	4 53	9 1	11 16	6 31	4 56	9 7	6 20	5 7	9 26	10 16
3	Wednesday	15 16 42	6 38	4 49	9 54	2 52	6 35	4 52	10 0	11 52	6 32	4 55	10 5	6 21	5 6	10 25	10 52
4	Thursday	15 35 12	6 39	4 48	10 59	3 38	6 36	4 51	11 4	ev 38	6 33	4 54	11 9	6 22	5 5	11 25	11 38
5	Friday	15 53 26	6 41	4 46	morn	4 38	6 37	4 50	morn	1 38	6 35	4 52	morn	6 23	5 4	morn	ev 38
6	Saturday	16 11 24	6 42	4 45	0 8	5 57	6 38	4 49	0 12	2 57	6 36	4 51	0 16	6 24	5 3	0 29	1 57
7	☾	16 29 6	6 43	4 44	1 20	7 25	6 40	4 48	1 23	4 25	6 37	4 50	1 26	6 25	5 2	1 35	3 25
8	Monday	16 46 31	6 45	4 43	2 34	8 40	6 41	4 47	2 36	5 40	6 38	4 49	2 37	6 26	5 2	2 42	4 40
9	Tuesday	17 3 40	6 46	4 42	3 50	9 34	6 42	4 46	3 50	6 34	6 39	4 48	3 51	6 27	5 1	3 51	5 34
10	Wednesday	17 20 31	6 47	4 41	5 8	10 21	6 43	4 45	5 7	7 21	6 40	4 48	5 6	6 28	5 0	5 1	6 21
11	Thursday	17 37 5	6 48	4 40	sets.	11 4	6 44	4 44	sets.	8 4	6 41	4 47	sets.	6 29	5 0	sets.	7 4
12	Friday	17 53 20	6 50	4 39	5 39	11 50	6 46	4 43	5 44	8 50	6 43	4 46	5 48	6 29	4 59	6 4	7 50
13	Saturday	18 9 16	6 51	4 38	6 26	morn	6 47	4 42	6 32	9 34	6 44	4 45	6 37	6 30	4 58	6 57	8 34
14	☾	18 24 53	6 52	4 37	7 21	0 34	6 48	4 41	7 28	10 18	6 45	4 44	7 33	6 31	4 58	7 54	9 18
15	Monday	18 40 11	6 53	4 36	8 23	1 18	6 49	4 40	8 29	11 4	6 46	4 43	8 35	6 32	4 57	8 55	10 4
16	Tuesday	18 55 8	6 55	4 35	9 28	2 4	6 50	4 39	9 34	11 53	6 47	4 43	9 39	6 33	4 57	9 57	10 53
17	Wednesday	19 9 45	6 56	4 34	10 34	2 53	6 52	4 38	10 39	morn	6 48	4 42	10 43	6 34	4 56	10 59	11 43
18	Thursday	19 24 2	6 57	4 33	11 39	3 43	6 53	4 38	11 33	0 43	6 49	4 41	11 46	6 35	4 56	11 58	morn
19	Friday	19 37 58	6 58	4 33	morn	4 46	6 54	4 37	morn	1 46	6 51	4 40	morn	6 36	4 55	morn	0 46
20	Saturday	19 51 31	7 0	4 32	0 42	5 59	6 55	4 36	0 45	2 59	6 52	4 40	0 47	6 37	4 55	0 55	1 59
21	☾	20 4 44	7 1	4 31	1 43	7 17	6 56	4 36	1 45	4 17	6 53	4 39	1 46	6 38	4 54	1 50	3 17
22	Monday	20 17 34	7 2	4 30	2 43	8 28	6 57	4 35	2 43	5 28	6 54	4 39	2 44	6 39	4 54	2 44	4 28
23	Tuesday	20 30 2	7 3	4 30	3 42	9 24	6 59	4 35	3 41	6 24	6 55	4 38	3 41	6 40	4 54	3 38	5 24
24	Wednesday	20 42 6	7 4	4 29	4 42	10 5	7 0	4 34	4 40	7 5	6 56	4 38	4 39	6 41	4 53	4 32	6 5
25	Thursday	20 53 47	7 6	4 29	5 42	10 41	7 1	4 34	5 39	7 41	6 57	4 37	5 37	6 41	4 53	5 27	6 41
26	Friday	21 5 5	7 7	4 28	rises.	11 15	7 2	4 33	rises.	8 15	6 58	4 37	rises.	6 42	4 53	rises.	7 15
27	Saturday	21 15 59	7 8	4 28	5 18	11 46	7 3	4 33	5 24	8 46	6 59	4 36	5 28	6 43	4 53	5 46	7 46
28	☾	21 26 29	7 9	4 27	6 0	ev 19	7 4	4 32	6 7	9 19	7 0	4 36	6 12	6 44	4 52	6 31	8 19
29	Monday	21 36 35	7 10	4 27	6 50	0 50	7 5	4 32	6 57	9 50	7 2	4 36	7 2	6 45	4 52	7 22	8 50
30	Tuesday	21 46 16	7 11	4 27	7 47	1 25	7 6	4 32	7 53	10 25	7 3	4 35	7 58	6 46	4 52	8 18	9 25

TOADS IN GARDENS.

Various remedies have been given for the prevention of the ravages of insects in gardens. Worms, or the larvæ of certain moths and beetles, often make great destruction among many kinds of plants. Various kinds of bugs attack melons, cucumbers, squashes, &c., and often destroy the crop soon after it appears above ground. Some kinds of worms seldom or never appear above the surface of the ground—attacking plants at their roots, or at such parts as are covered by earth. Others eat the leaves, and sometimes the stems of young plants. The latter are frequently called "cut worms," from the manner in which they cut off plants at the surface of the earth. In this way they totally destroy some kinds of plants, as beans, melons, cabbages, &c., which, when once cut off in this manner, can make no farther growth. One of the best means of preventing the ravages of these insects, is to hunt them early every morning, while they are near the plants they have eaten the previous night, and destroy them. Young chickens and ducks are sometimes kept in gardens, that they may devour the insects. This is but a partial remedy. Chickens will only eat a few species of insects—some of the most destructive they leave unnoticed—and they will always do more or less injury by eating various plants, and by scratching. Ducks feed more indiscriminately on insects, and do less damage to the plants. But *toads* will do much more good in proportion to the number, (if well grown,) than either chickens or ducks. They do no injury whatever; they feed altogether on insects, and devour almost every species that infests the garden. They have another advantage over chickens or ducks—they seek their food at times when insects are most abroad; at dusk of evening, when fowls are at rest. Excepting the black "pumpkin bug," toads will fill their stomach with any bug, worm, or fly, that belongs to the catalogue of enemies to the farmer or gardener.

FATTENING SWINE ON APPLES.

The evidence which has heretofore been published, in regard to the value of apples as food for stock, is supported by facts which are frequently brought to our knowledge. Mr. James M. Ellis, of Onondaga Hill, lately stated to us that he had been in the practice of using apples extensively for fattening hogs, for several years, and their value had been proved to be such, that he deems it an object of profit to produce pork by the aid of apples, but would not, otherwise, so regard it. He has a large apple-orchard, in which he allows his hogs to range most of the season. They are of much benefit to the trees by destroying many of the insects which the fallen fruit contains, and by keeping the ground loose and rich. As the fruit approaches ripeness, the nutriment increases, and the hogs thrive faster. When nearly ripe, those apples which are not readily marketable, boiled, or steamed, are mixed with meal and the slops of the kitchen and dairy, constitute the food for fattening hogs. The meal is increased towards the close of the fattening process, being at last equal to one-fourth of the bulk of apples. Mr. E. informs us that his pork is always of excellent quality, and is so regarded by all who have purchased it.

12th Month. **DECEMBER, 1852.** **31 Days.**

MOON'S PHASES.	BOSTON.	NEW-YORK.	BALTIM'RE.	CHARLES'N.	SUN ON MERIDIAN.
	D. H. M.	H. M.	H. M.	H. M.	D. H. M. S.
Third Quarter.	4 7 38 mo.	7 26 mo.	7 15 mo.	7 2 mo.	1 11 49 29
New Moon....	10 10 48 ev.	10 36 ev.	10 25 ev.	10 12 ev.	9 11 52 52
First Quarter..	18 3 55 mo.	3 43 mo.	3 32 mo.	3 19 mo.	17 11 56 42
Full Moon.....	26 8 26 mo.	8 14 mo.	8 3 mo	7 50 mo.	25 ev. 0 41

Get everything ready for winter. Kill swine, and poultry designed for the holidays' market. Cut wood before snow comes, if possible; pile it up and haul it with the first sledding. See to all the live-stock. Any feeble lambs or other sheep should be put by themselves, and well nourished

Day of Month.	Day of Week.	Sun's decl'n S.	CALENDAR For Boston, New-England, New-York State, Michigan, Wisconsin, and Iowa.				CALENDAR For New-York City, Philadelphia, Conn., New-Jersey, Pennsyl'a, Ohio, Indiana, and Illinois.				CALENDAR For Baltimore, Virginia, Kentucky, and Missouri.			CALENDAR For Charleston, N. Carolina, Tenn., Georgia, Alabama, Mississippi, and Louisiana.			
			Sun rises.	Sun sets.	Moon rises.	H. W. Boston	Sun rises	Sun sets.	Moon rises,	H W. N. Y'k	Sun rises.	Sun sets.	Moon rises.	Sun rises.	Sun sets.	Moon rises.	H. W. Chl'tn.
		° ′ ″	H.M.	H.M.	H. M.	H. M.	H.M.	H.M.	H. M.	H. M.	H.M.	H.M.	H. M.	H.M.	H.M.	H. M.	H. M.
1	Wednesday	21 55 32	7 12	4 26	8 50	2 1	7 7	4 31	8 55	11 1	7 4	4 35	9 0	6 47	4 52	9 17	10 1
2	Thursday	22 4 23	7 14	4 26	9 56	2 41	7 8	4 31	10 1	11 41	7 5	4 35	10 5	6 48	4 52	10 19	10 41
3	Friday	22 12 48	7 15	4 26	11 5	3 26	7 9	4 31	11 9	ev 26	7 6	4 35	11 12	6 48	4 52	11 22	11 26
4	Saturday.......	22 20 47	7 16	4 26	morn	4 21	7 10	4 31	morn	1 21	7 6	4 35	morn	6 49	4 52	morn	ev 21
5	ℭ	22 28 21	7 17	4 25	0 16	5 28	7 11	4 31	0 18	2 28	7 7	4 35	0 20	6 50	4 52	0 27	1 28
6	Monday........	22 35 27	7 18	4 25	1 28	6 46	7 12	4 31	1 29	3 46	7 8	4 35	1 30	6 51	4 52	1 32	2 46
7	Tuesday	22 42 8	7 19	4 25	2 42	7 55	7 13	4 30	2 42	4 55	7 9	4 35	2 41	6 52	4 52	2 39	3 55
8	Wednesday.....	22 48 21	7 19	4 25	3 58	8 59	7 14	4 30	3 56	5 59	7 10	4 35	3 55	6 52	4 52	3 48	4 59
9	Thursday	22 54 9	7 20	4 25	5 16	9 53	7 15	4 30	5 13	6 53	7 11	4 35	5 11	6 53	4 52	5 0	5 53
10	Friday	22 59 28	7 21	4 25	sets.	10 42	7 16	4 31	sets.	7 42	7 12	4 35	sets.	6 54	4 53	sets.	6 42
11	Saturday.......	23 4 21	7 22	4 25	5 2	11 31	7 17	4 31	5 9	8 31	7 13	4 35	5 14	6 55	4 53	5 34	7 31
12	ℭ	23 8 46	7 23	4 25	6 2	morn	7 18	4 31	6 9	9 20	7 13	4 35	6 14	6 55	4 53	6 35	8 20
13	Monday........	23 12 43	7 24	4 26	7 8	0 20	7 18	4 31	7 14	10 7	7 14	4 35	7 19	6 56	4 53	7 39	9 7
14	Tuesday	23 16 12	7 25	4 26	8 16	1 7	7 19	4 31	8 22	10 54	7 15	4 35	8 26	6 57	4 54	8 43	9 54
15	Wednesday.....	23 19 14	7 25	4 26	9 24	1 54	7 20	4 32	9 28	11 39	7 16	4 36	9 32	6 57	4 54	9 45	10 39
16	Thursday	23 21 47	7 26	4 26	10 29	2 39	7 20	4 32	10 33	morn	7 16	4 36	10 35	6 58	4 54	10 45	11 28
17	Friday	23 23 52	7 27	4 27	11 32	3 28	7 21	4 32	11 34	0 28	7 17	4 36	11 36	6 59	4 55	11 42	morn
18	Saturday.......	23 25 29	7 27	4 27	morn	4 17	7 22	4 33	morn	1 17	7 18	4 37	morn	6 59	4 55	morn	0 17
19	ℭ	23 26 38	7 28	4 27	0 33	5 10	7 22	4 33	0 34	2 10	7 18	4 37	0 35	7 0	4 55	0 37	1 10
20	Monday........	23 27 19	7 28	4 28	1 33	6 13	7 23	4 33	1 33	3 13	7 19	4 38	1 33	7 0	4 56	1 31	2 13
21	Tuesday	23 27 31	7 29	4 28	2 32	7 20	7 23	4 34	2 31	4 20	7 19	4 38	2 30	7 1	4 56	2 25	3 20
22	Wednesday	23 27 15	7 29	4 29	3 32	8 23	7 24	4 34	3 30	5 23	7 20	4 39	3 28	7 1	4 57	3 19	4 23
23	Thursday	23 26 29	7 30	4 29	4 33	9 20	7 24	4 35	4 29	6 20	7 20	4 39	4 27	7 2	4 57	4 15	5 20
24	Friday	23 25 17	7 30	4 30	5 34	10 6	7 25	4 36	5 29	7 6	7 21	4 40	5 26	7 2	4 58	5 11	6 6
25	Saturday.......	23 23 36	7 31	4 31	6 34	10 44	7 25	4 36	6 29	7 44	7 21	4 40	6 25	7 3	4 59	6 8	6 44
26	ℭ	23 21 36	7 31	4 31	rises.	11 22	7 25	4 37	rises.	8 22	7 21	4 41	rises.	7 3	4 59	rises.	7 22
27	Monday	23 18 49	7 31	4 32	5 40	11 59	7 26	4 38	5 47	8 59	7 22	4 42	5 52	7 3	5 0	6 11	7 59
28	Tuesday	23 15 44	7 32	4 33	6 42	ev 37	7 26	4 38	6 48	9 37	7 22	4 42	6 53	7 4	5 1	7 11	8 37
29	Wednesday.....	23 12 10	7 32	4 34	7 48	1 14	7 26	4 39	7 53	10 14	7 22	4 43	7 58	7 4	5 1	8 13	9 14
30	Thursday	23 8 8	7 32	4 34	8 57	1 53	7 27	4 40	9 1	10 53	7 22	4 44	9 4	7 4	5 2	9 16	9 53
31	Friday.........	23 3 40	7 32	4 35	10 7	2 33	7 27	4 41	10 9	11 33	7 23	4 45	10 12	7 5	5 3	10 19	10 33

AGRICULTURAL PUBLICATIONS.

If farmers would read and put in practice the teachings contained in The Cultivator, and other periodicals, they could hardly fail of making progress in agricultural knowledge. From reading some of the early volumes of The Cultivator and Genesee Farmer, I was induced to change from a shallow, to a deep and thorough system of cultivation—paying particular regard to drainage, and the saving and application of manures—which have more than doubled the products per acre; and not only so, it has rendered the products measurably sure, and failures that were heretofore charged to the seasons were found to be chargeable to the method of cultivation.

I have mentioned the sources to which I am mainly indebted for the progress that I have made in agricultural improvement at this time, for the reason that of late we not unfrequently see it stated that eastern agricultural papers are not adapted to our wants—that they are not calculated for this latitude. Now whilst we admit the merits of our western papers, and are from duty and interest bound to sustain them, it is not admitted that eastern papers are not adapted to our wants; for we believe that wherever they are read, and what they teach is put in practice, they will answer for this or any other latitude where the cultivator of the soil is desirous of improving in his business. Linus Cone. *Troy, Oakland county, Mich., June* 25, 1851.

The defects of the mind, like those of the face, grow worse as we grow old.

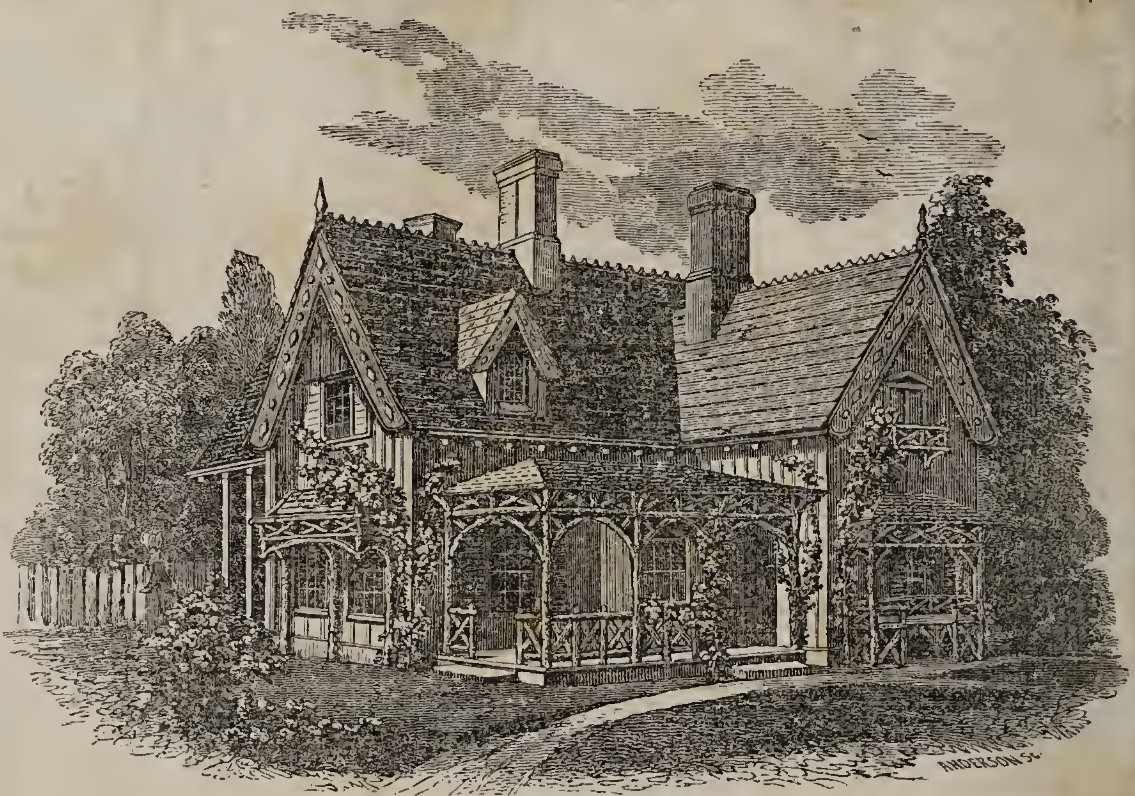
SALT AS FOOD FOR PLANTS.

Professor Way, chemist to the Royal Agricultural Society, in a lecture on this subject, stated, as a conclusion to which his investigations had led him, that common salt was neither directly nor indirectly, a constituent of the food of plants. He stated, however, as his belief, that salt did, in some instances, produce an action beneficial to vegetation, on some soils. He had not carried out his investigations to such an extent as to say, positively, to what this effect is attributable, but he was "led to believe that the common salt acted on certain silicates of lime present, in a way as yet not understood; and at the same time as it afforded a supply of lime to plants, gave rise, probably, to a modification of silica, important to the straw of the cereals."

In reference to Prof. Way's remarks, other members of the society gave the results of their experience in the application of salt to land. Col. Challoner said he did not consider it acted simply as a manure on grain crops, "but it stiffened and brightened the straw, and caused it to ripen from 3 to 5 days earlier than it would otherwise have done." Mr. Barrow has found salt improve the strength and quality of his wheat straw, his neighbors' crops having been laid while his stood well. Mr. Mechi said—"without being able to give the scientific reason, salt gave strength and brightness to the wheat straw and prevented its lodging." He applied it at the rate of 3 cwt. per acre, mixed with the same weight of guano."

The writer's labor makes the reader's ease.

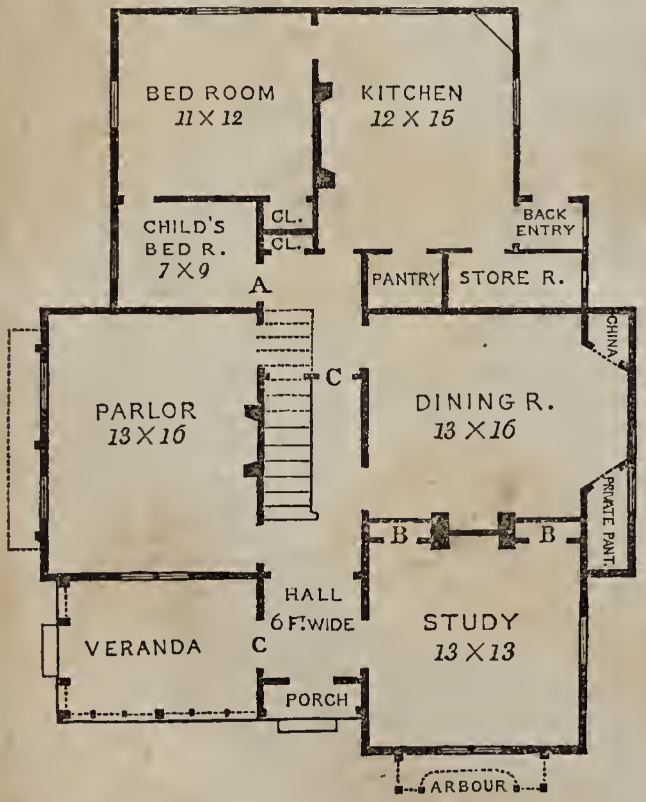
A SNUG COUNTRY RESIDENCE.


ANDERSON Sc.

ONE of the leading defects in the plans of country residences, in the works already published on this subject, is the want of any intellectual provision for proprietors of quite limited means. Hence we find the more costly houses only, are supplied with a *library* or *study*. Now, we think the education of the mind quite as important as the manufacture of butter and cheese; and that provision should be made for the pursuit of useful knowledge as well as for the pursuit of dimes and bank-notes. Indeed, we find that some of the best knowledge-stocked families are among those of slender means, and many of the most eminent men have risen on their own labors.

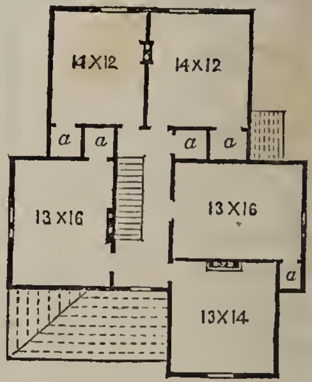
As an exception to this general defect in country houses, we give a plan, view, and condensed description of a cottage from the *Horticulturist*, intended, as the residence of a *country clergyman*, but which may be adopted with great fitness by any man of moderate means, who wishes to educate his own children, and make them intelligent, intellectual, and useful.

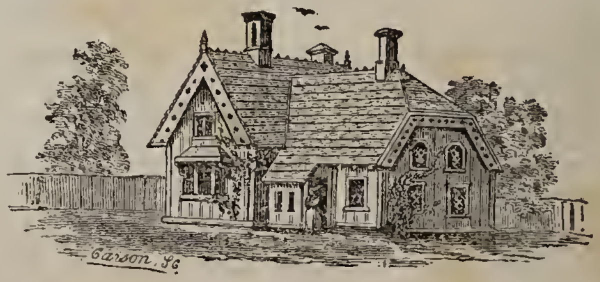
The cottage Gothic is given in the view—as adapted to rural scenery, and giving more room for its cost than any other style. The rustic veranda and trellis, for the support of climbers, and for giving the whole an interesting rural appearance, are made of ceder poles with the bark on,—and are thus erected at a very trifling expense—and are more appropriate than any elaborate carpentry.



The plan needs but little explanation. A door at D, (printed by mistake *C* in the cut,) opens on the veranda, and another at C shuts off the back entry from the front hall. The study is fitted with book-cases at B B; the living-room has convenient closets so placed as to form a kind of bay-window effect, quite pleasing in appearance. The door between the child's bed-room and the back entry is glazed, to admit light to the latter. If desired, the closets between the entry and bed-room may give place to a door.

The second-floor plan (drawn on a smaller scale) shows five good bed-rooms with a closet to each. Below is added a sketch of the rear, showing the back porch, and arrangement of the kitchen-wing.



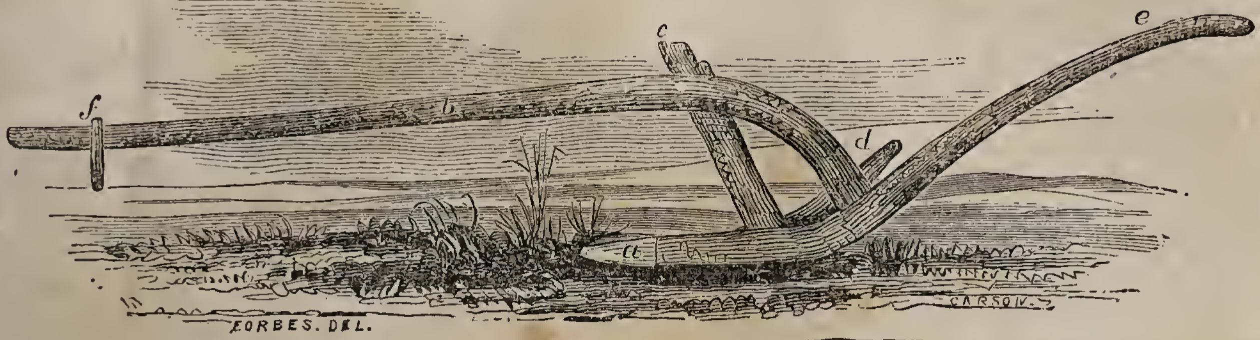


The whole may be constructed of wood,—where materials and labor, are not very costly,—in a simple manner—the inside walls to be whitewashed or neatly papered—the first story 9 to 10 ft. high only,—for about $1,200.

THE PHILOSOPHER'S STONE.—Learned men toiled for ages in trying to find out what this mysterious substance was, which should change the baser metals to gold. A dethroned monarch had discovered the secret, and was promised his throne again on condition that he would reveal it. The preliminaries were settled, and his power was regained, when he sent, in fulfilment of his promise, with great pomp and ceremony, a *Plow!* John Randolph once stopped in one of his rambling speeches, and fixing his keen eyes, exclaimed, "Mr. Speaker—I have found the philosopher's stone! It consists of these four monosyllables, 'PAY-AS-YOU-GO!'"

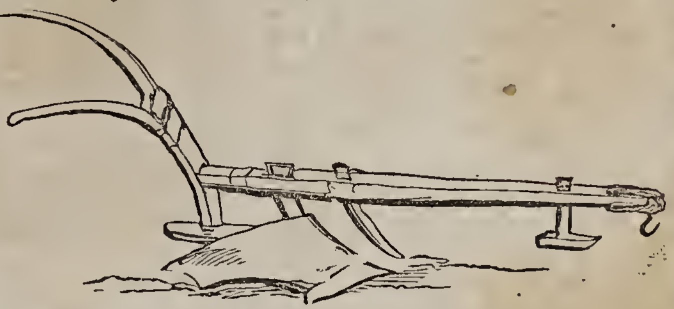
THE OLD AND THE NEW PLOWS.

The first engraving we here present, exhibits the plow at present used in Morocco. It is certainly not fit to be used at a State Plowing Match, although it may be made very cheap. We believe it has not been patented.

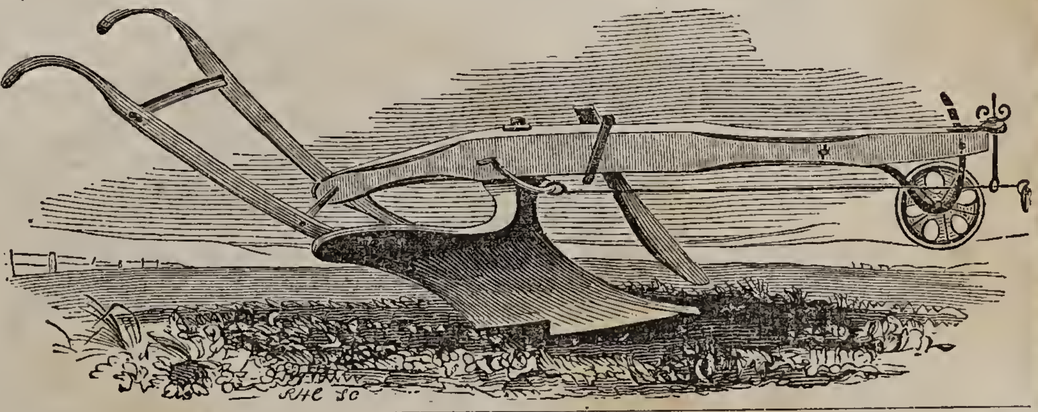


The point only is shod with iron. Does the reader ask why the Moors continue to the present day to use such a wretched implement? The answer is as simple as the question—*they do not take agricultural papers!*

The next figure represents one of the best plows used in Baden, in Germany. This is about equal to the best of the ancient plows of Greece and Rome. Why do not the Germans have better plows? Agricultural papers do not circulate in Germany as they do in this country! Thousands of even our middle-aged farmers can remember when the old "bull plow" was almost *our* sole implement, and was little if any better than the German plow. These periodicals were soon after commenced, and the *bull plows* disappeared.



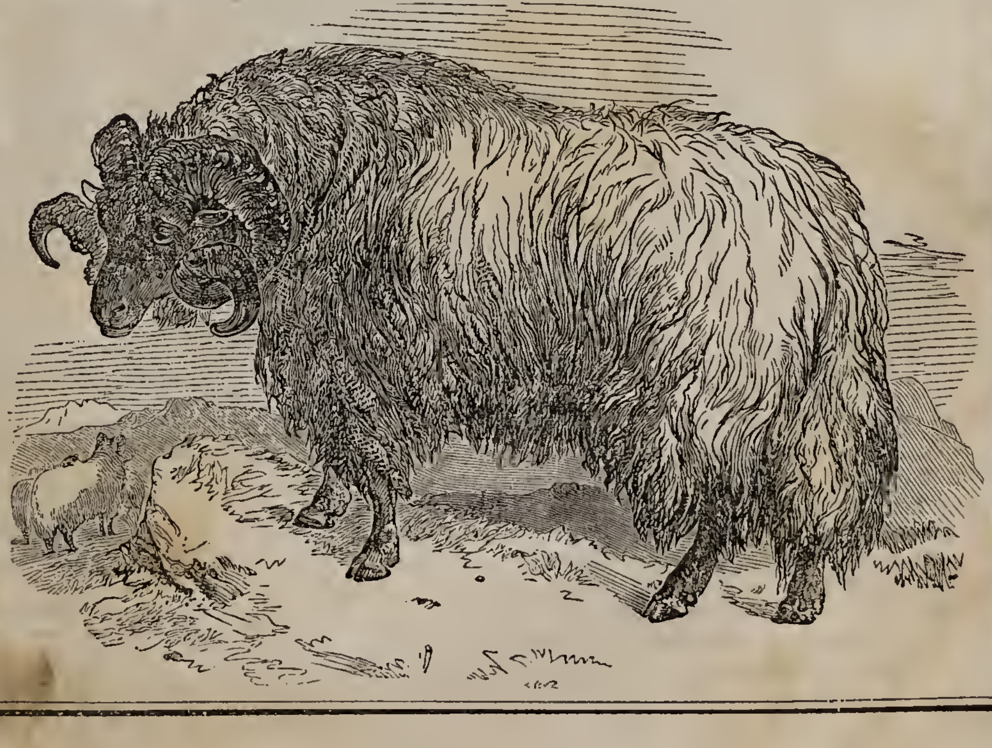
Now contrast these awkward machines with those of the best modern construction—for example, take *Prouty & Mears' Centre Draft Plow*, with its beauty of form, strength, lightness, and finish, working with the precision and steadiness of a locomotive, — and then say whether we have not the advantage of these ancient tillers of the Eastern World, in being able to secure to ourselves, for a dollar a year, all the valuable information which is constantly and newly turned out by the experience and practice of the best farmers of our country—and which is now circulating among two or three hundred thousand of the most intelligent cultivators of the soil, through the medium of the press.



THE BLACK-FACED SCOTCH SHEEP.

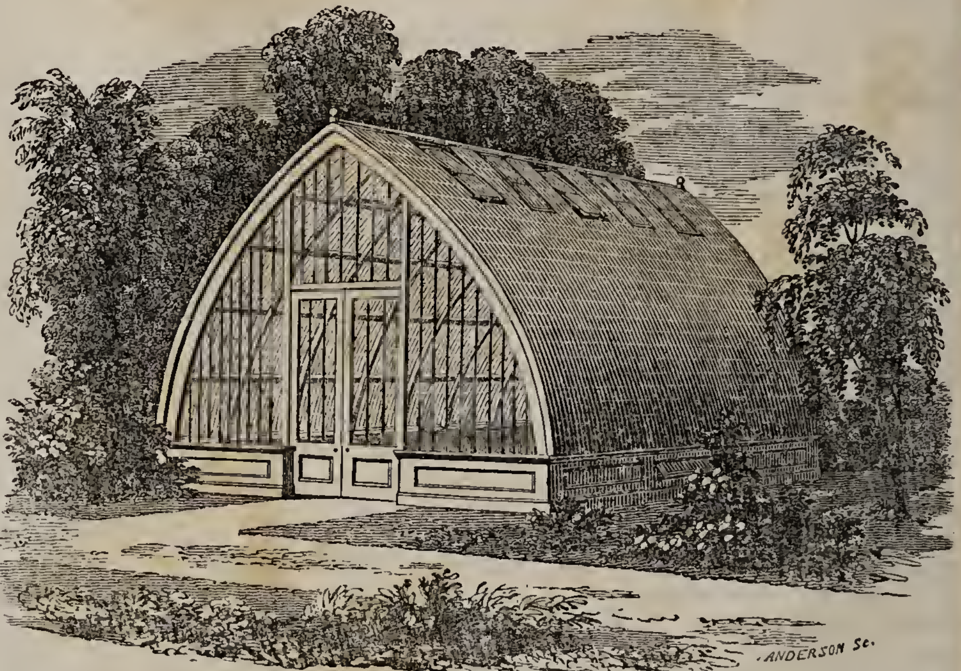
A singular and wonderfully hardy animal is the Black-faced sheep of the Highlands in Scotland. It is said that in the bleakest and wildest pastures of the mountain ranges, none but this kind of sheep can exist. The Mutton is remarkable for its fineness and delicacy of flavor. The quarters weigh about sixteen pounds. The fleeces average about four pounds, and the wool is used only for carpets and the coarser worsteds. Some have proposed to introduce this sheep into the rougher and more mountainous districts of this country.

The Best Manures.—Gypsum is often a very good manure; lime is mostly highly useful; ashes sometimes operate to great benefit; guano is frequently very powerful; and yard manure is excellent under nearly all circumstances;—yet there is reason to believe that the best fertilizer of all, and one without which all of these together will be of little use,—is the *spirit of industry, enterprise, and intelligence.*



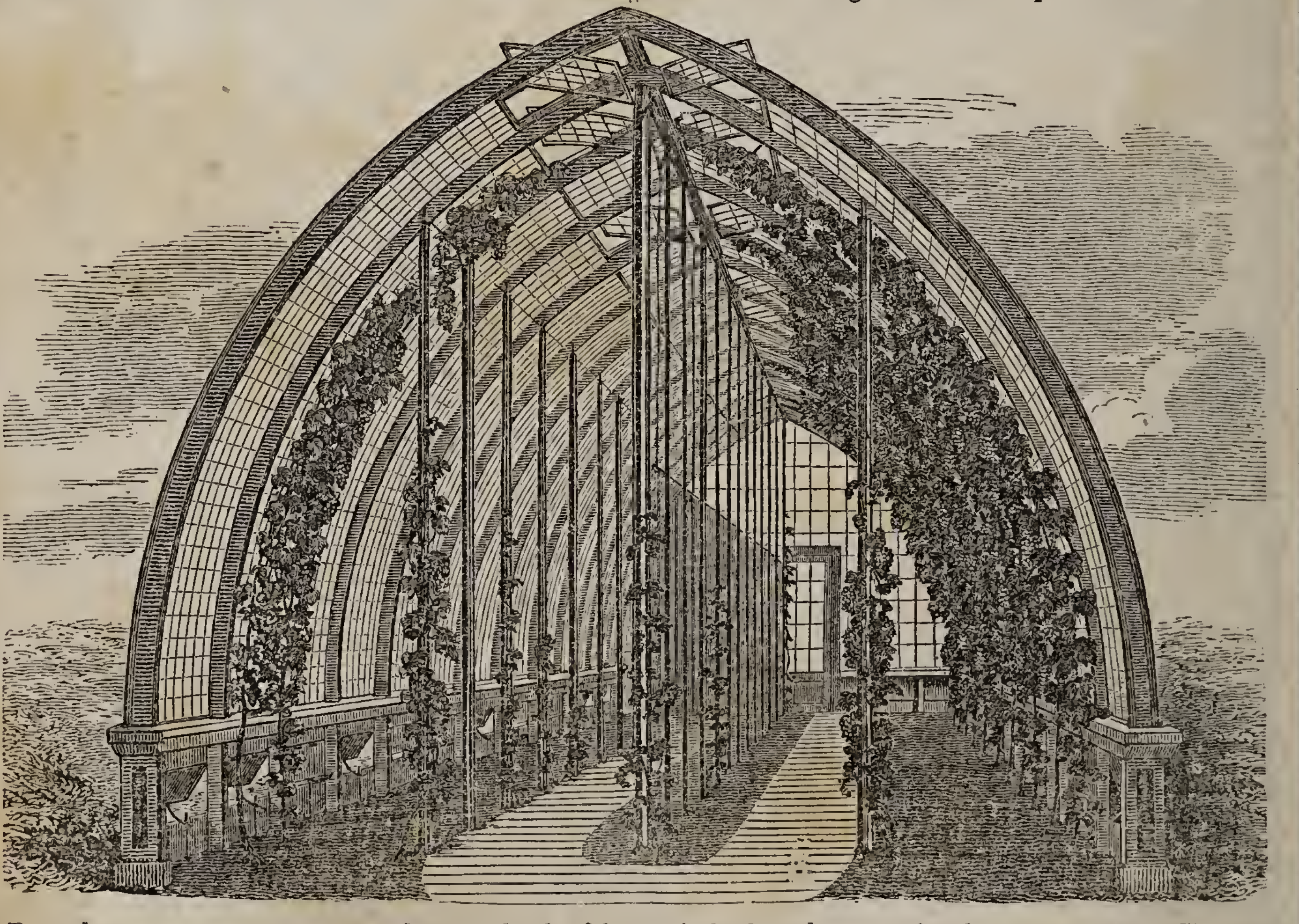
COLD VINERIES.

THE rapid introduction of cold vineries, has, of late years, formed quite an era in the cultivation of exotic grapes. Many years ago, a great deal of money, and a great deal of labor were expended in attempts to cultivate them in open air, all of which were generally repaid with a great deal of vexation at the total failure caused by mildew. Cold vineries, requiring incomparably less attention than vineries heated by fire, and ripening the fruit some weeks earlier than by open air culture, and giving fine delicious crops with much certainty, have saved the foreign sorts from rejection.


ANDERSON Sc.

The annexed figure represents a very neat and tasteful cold grape-house, erected by H. INGERSOLL, near Philadelphia. It is 18 feet by 43 1-2 feet, and 14 feet high; was built of the best materials, by mechanics at city prices, and cost $500.

The second engraving exhibits the interior of a larger grapery, made on the same plan, by P. S. VAN RENSSELAER, at Clinton Point, on the Hudson. This being about twice as long as the preceding, with the same width and height, must have cost about one thousand dollars.



To such as may not wish to expend so much, the following exceedingly cheap plan is recommended, being less than half the cost of ordinary green-houses. It is copied in substance from the *Horticulturist*, and is the mode adopted for cheap structures by RIVERS, the celebrated nurseryman of Sawbridgeworth, England.

"In fig. 1 (see next page,) we give a sketch of a section of one of these cheap structures, from which any of our readers may construct a similar house.

The frame of this building is wholly of wood. Posts are set into the ground about six feet apart. These posts rise seven feet above the surface at the rear (A), and two feet three inches at the front (B.) They are sheathed or weather-boarded in the common way, on the outside of the posts,[*] along the back and front—the the two ends being also boarded up—with a door in each or in both ends—opposite the sunken walk (C). This walk is sunken, partly to economise cost, and is needed to raise the back and front high enough to walk under the roof, and partly to bring the plants as near the glass as possible—a great desideratum in all plant culture.

So far, it will be seen that this structure costs little more than a board fence. Now let us examine the glass roof, for it is here that the cost usually lies. And as this cost is not so much in the glass, as in the sliding sashes, all nicely jointed and framed, and the grooved rafters in which they are to slide, Mr. Rivers has cut loose from the whole system of sashes, and made the entire roof one fixture. Ventilation, which is not to be dispensed with, he provides for in a much more effectual manner than the common one, by having boards, *d, c*, both at the front and rear—(either at intervals or along the whole line, as may be needful,)—hung upon hinges, so as to open outwards, and permit a stream of air to pass over through the breadth of the whole house.

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[*] If for a vinery or a house to be used in summer, this would be sufficient; if for a green-house, then the posts should be boarded up both sides, and the space within filled-in with tan, pounded clay, or any thing usually employed for this purpose.

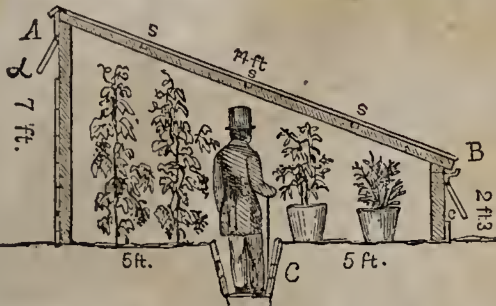


Fig. 1.

To construct the roof, a strip of timber—what is usually called a wale strip—is laid along the top of the front and back parts to form a "plate." To this plate are nailed the rafter pieces, about five or six feet apart. Across these rafter pieces, light strips, i. e. *s, s, s*, about two inches by one inch, are let in on a level with the top of the rafter. Then, along the whole length of the roof, in the direction of the rafters, light strips are nailed to the bearers, *s, s, s*. These strips are *rebated* on the top like a common sash-bar, and are of course laid upon the roof just far enough apart to receive the glass—say 7 inches, (if 7 by 9 glass is to be used.) No *framing* of sashes is necessary, and when the whole is glazed, it is light, strong, and durable, and is put together so easily, that a house 30 or 40 feet long, can be built very quickly. The strips that make the sash bars are both sawn and rebated at the saw mill; and as many of Mr. R.'s houses are built of rough stuff, left unplained, and coated over with ship-varnish instead of paint, the construction is reduced to the minimum of simplicity and expense. The house we show a section of in fig. 1, is used as an early forcing house for grapes and other fruits, and the grapes are grown upright in an inside border on one side of the walk, while the other side is occupied with fruit trees—peaches, nectarines, and figs, in pots, laden with fruit.

For this climate, a variation of this cheap structure would be very useful as a vinery without fire heat. In this case the border should be made *outside* of the front wall (B), the vines brought under the boarding and trained up under the glass, about 8 inches below the glass, from front to rear. The sunken walk could then be dispensed with, as there would be height enough along the back wall—which is seven feet high, for a person to walk erect. Such a house would make a capital cold vinery at very trifling cost."

PYRAMIDAL PEAR TREES.

A great advantage of pear trees trained as dwarfs, or in the form of pyramids, is the little room they occupy in limited grounds, and more especially in village gardens. They also come sooner into bearing in most instances, although this is commonly overrated. The disadvantages are, they require constant and high cultivation, which it is not always easy to persuade land-owners, with the present high prices of labor in this country, to give them; and a still greater amount of attention is required to keep them properly pruned, to preserve them in the best bearing state and most beautiful form. For example, the best shaped dwarf pear tree, such as is represented by Fig. 1, requires a thorough going-over four times in the year, viz: early in the spring in the first place, to cut back all the leading shoots;—then again early in summer, all the new side shoots must be pinched off; thirdly, about the last of summer, the second shoots which have shot out, are broken partly off and left hanging down all over the tree, so as to stop the flow of sap gradually, and not so suddenly as breaking them off at once; and fourthly, several days afterwards the whole are removed. This is at least the course pursued by Cappe, the prince of pruners, in the great *Jardin des Plantes* at Paris.

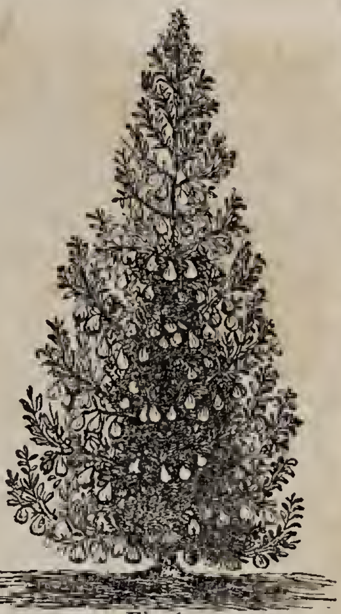


Fig. 1.

Any one may easily estimate the task of thus going over a tree full of branches and shoots, four times a year, and then may multiply the amount of labor by all the trees in the garden. We mention this not to discourage handsome and finished culture, but that all may count the cost in advance; and especially for the benefit of those who cannot afford to devote five minutes yearly to cultivating the soil round each tree, or to give it even a triennial pruning. Such should not undertake with dwarf trees; but those who are willing to devote the attention will be well repaid by the fine crops and beautiful appearance of a well managed garden of pyramids.

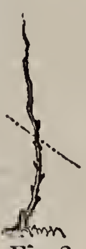


Fig. 2.

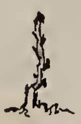


Fig. 3.

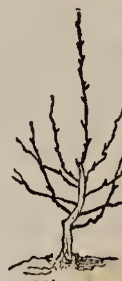


Fig. 4.

Dwarf pears often look badly because their training was not begun right—their *education* was not properly comenced. The young one year's shoot must be cut off in the first place early in spring, at the point shown by the dotted line in Fig. 2, so as to leave a stump of eight or a dozen buds as in Fig. 3. This will throw out new shoots and form, by autumn, the two-year dwarf or pyramid, Fig. 4. These side shoots are again cut back two-thirds or more the next spring, so as to give the tree a good pyramidal shape; and thus the operation is continued, till the mature pyramid is formed as in Fig. 5. During all this time, however, summer pruning, or pinching off all shoots that are pushing beyond their proper bounds, must be carefully attended to. Those who are willing to do all this work *con amore*, will have handsome pyramids—those who regard it as an irksome task, would do better never to attempt it.

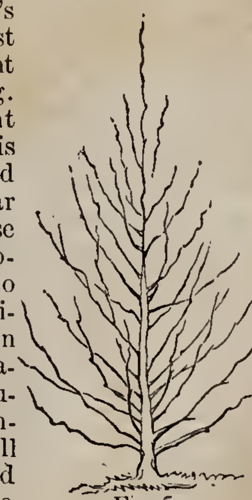


Fig 5.

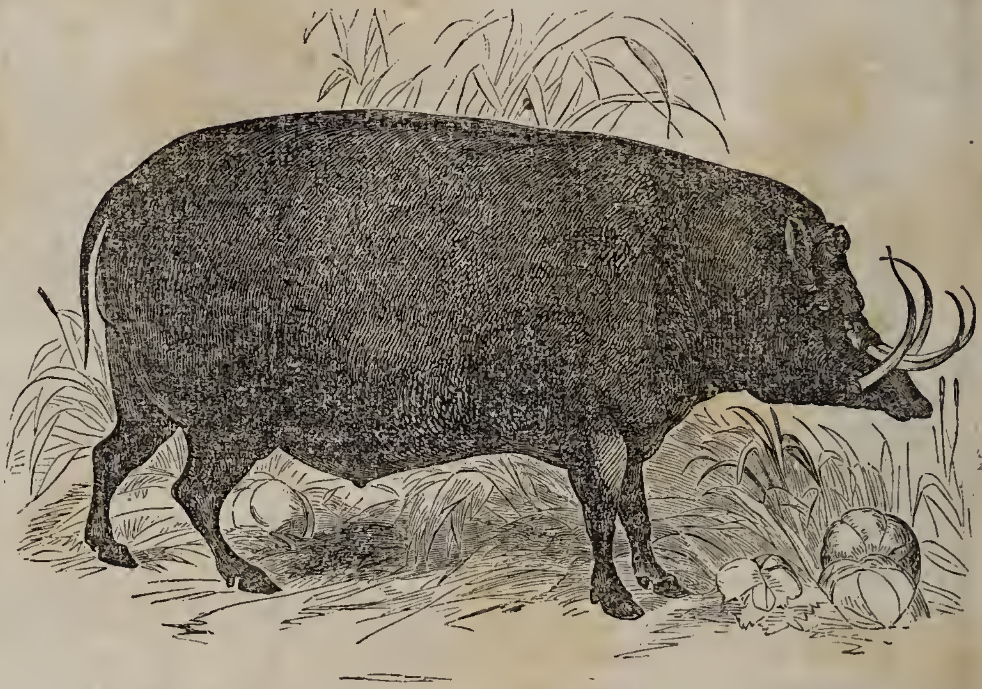
LABOR AND ITS PAY.

The New-England Farmer gives a good example of the successful management of an orchard. When the trees were an inch in diameter, manure was applied, and they were kept dug around, the circle thus cultivated being yearly increased in size as the roots extended in length. This circle has now become twelve feet in diameter. Chip manure, bones, ashes, and other fertilizing substances, are often applied. The result of this labor is, that the owner obtains yearly large crops of beautiful and excellent fruit, and obtains more money from his orchard than many farmers do from all sources, although this does not constitute his main business.

THE BABIRUSSA.

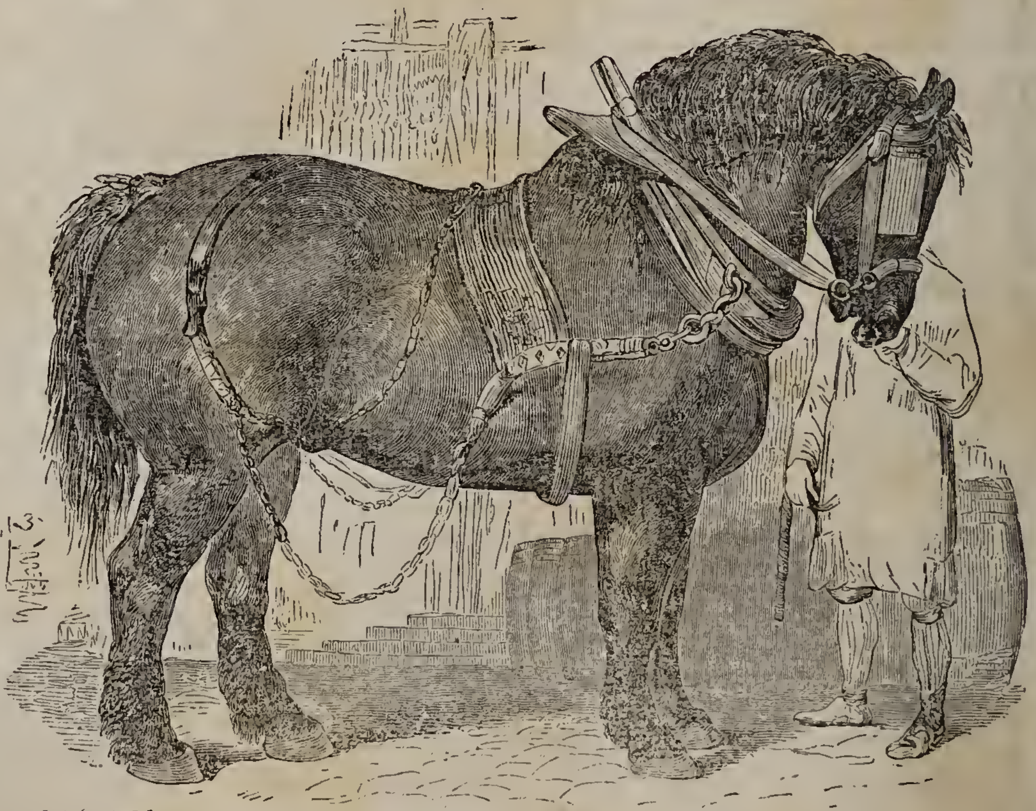
This animal belongs to the hog family; but from its great dissimilarity to its congeners, it is ranked by naturalists in a separate genus. Its native country is the Indian Archipelago, from which it has been occasionally taken to various European countries, but has never been fairly reclaimed from its wild state, though specimens have been kept for several years in menagaries and museums. The animal resembles the hog in its habits, and its flesh is said to be good for food. Martin observes:

"Though allied to *sus*, (hog) the Babirussa is distinguished by certain peculiarities, one of which is the upward direction of the alveoli of the upper tusks or canine teeth; these tusks in the male, are enormously developed, as to length, and are extraordinary both in their form and position. They do not pass out between the lips, as in the hog, but cut through the skin of the snout, so as to appear like horns growing in an unusual situation. Instead of being stout and strong, they are slender, and rising vertically, curve backwards with a slight indication outwards, so as to form part of a circle, and often touch the skin of the forehead. The tusks of the lower jaw are sharp and powerful, and emerge from between the lips; they bend upwards and outwards, and are sufficiently formidable weapons. The upper tusks are wanting in the female, and the lower are small. The incisors are four in number in each jaw. The molars are five on each side, above and below."



THE ENGLISH DRAFT-HORSE.

Some of the finest specimens of the English Draft-Horse, possess a union of enormous muscle and graceful form, which is not to be found in any other animal. The celebrated imported stallion, Sampson, of this breed, belonging to J. Robinson, of Palmyra, N. Y., always reminded us of the massive strength of the locomotive. We have known him to draw loads which would have proved hard for an ordinary two horse team. His owner offered to let him draw against any ordinary yoke of oxen, but we believe no one accepted the offer.



Half-bloods from this animal and others of the kind imported into this country, have proved to be of great value as laboring farm-horses. We have seen two three year colts lay over a green sward to the depth of seven inches, in the most graceful manner. These half bloods are usually very quiet and tractable.

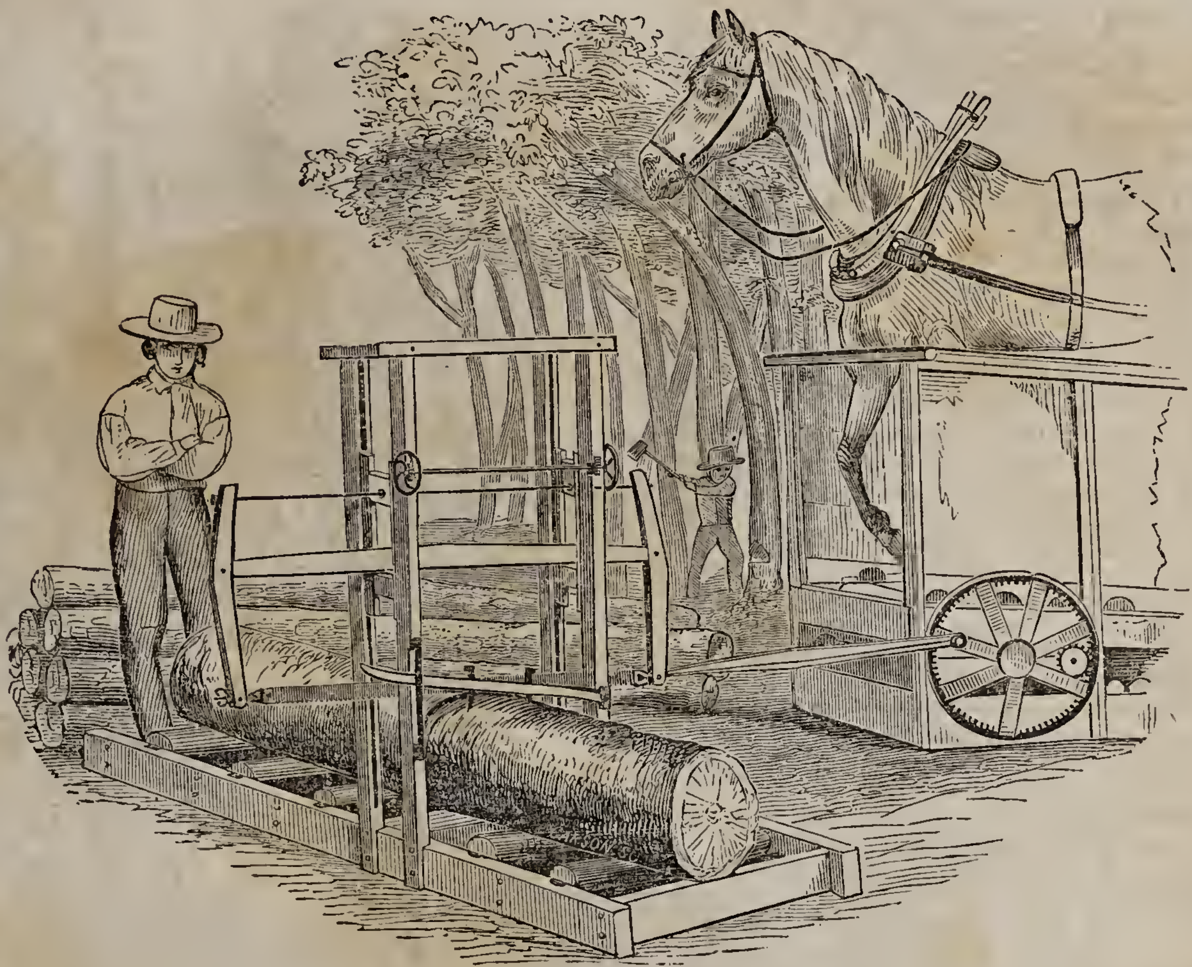
GOOSBERRIES AND CURRANTS.

The practice of training these up in the form of small trees, however well suited to some climates, will not answer for that of the United States. They should be pruned down to the ground every three or four years, so that no very old wood shall be allowed to exist. Some prefer leaving them to grow for about six years, which is the longest period admissible. The old wood should, however, be pruned out more or less every spring; and they must be kept well manured and cultivated.

FEEDING STOCK.

Always be regular and systematic in feeding your stock. Regularity is the best balance wheel of Agricultural enterprise; derange this, and the machine "runs down." Stated hours and specified quantities—graduated according to circumstances, should invariably be observed. "Neither too little nor too much—too often nor too seldom," is the true policy. The coarsest fodder should be fed in mid-winter. Animals have then sharp appetites, and will eat what would be rejected at other times. In moderate weather, stock may be fed in yards.

CROSS-CUT SAW WORKED BY A HORSE.

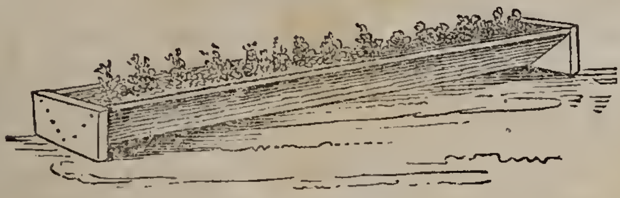


A cross-cut saw, for cutting up logs in the woods, and for other purposes, as represented in the above cut, is manufactured by Emery & Co. of Albany. The figure shows the mode of construction, without any explanation. The wheel which moves the saw, performs about fifty revolutions in a minute. The great amount of labor saved will be evident, when it is stated that those who have tried this machine, have been able, without any change of horses, to work up from ten to fourteen cords of hard wood, into lengths of eighteen inches, in a day. A solid hard-wood log, two feet through, has been cut off in two minutes. The great advantage which this apparatus possesses over the circular saw, which requires the logs to be previously cut and split into cord-wood, is apparent at a glance.

The whole cost, including horse-power, of a machine for one horse, varies from $90 to $105; and for two horses from $120 to $135.

EARLY PEAS.

If you want to have peas a week or two earlier than all your neighbors, even those who plant the very day the snow is gone, and right under the south side of a tight fence, proceed according to the following plan, described in the Horticulturist. Make a trough of roughest boards like that shown in the figure, driving the nails partly in, so that they may be easily drawn; then fill it with good rich soil, and plant the peas. This may be done a fortnight or more before spring opens. The troughs must then be placed under some kind of a frame and covered with sash, in the most sheltered and sunny spot in the garden. By the time they are a few inches high, a furrow may be made in the garden, the trough set snugly in, the nails withdrawn, and the boards carefully removed, pressing the earth down evenly. Peas thus treated, (says Old Digger,) "don't know that they have been moved at all," but grow right on, and are ready to stick by the time that others obtain the first peep of day-light.



AN INVADING ARMY.

We once knew a man who was very jealous of "*his rights.*" He would rather lose ten dollars worth of time in attending a law-suit, than have his neighbor wrong him of one dollar. He would go seven miles and lose two hours to get one cent more on a few pounds of butter. He once drove two miles round, over a rough road, to save two cents plank-road toll, and broke his wagon which cost four dollars to mend. Yet this same man, whose indignation was always aroused at the thought of a foreign or domestic foe, tamely allowed an army of at least 20,000 mulleins, 8,000 horse-thistles, 50,000 Canada thistles, 2,500 burdocks, and 900 elder bushes, to invade his fields, and the general opinion among his neighbors, was, that the same strength of soil and amount of land which these required for their growth, would have grown 40 bushels of wheat, 90 bushels of corn, and 120 bushels of potatoes.

PLOW STRAIGHT.

It is an old saying that "more corn grows on crooked rows than on straight"—and why? Because every body plants crooked rows. Now, still more would grow on straight ones, if every body laid them straight. So likewise, every farmer who plows straight furrows raises the largest crops. "Why so," asks the reader? Because the man who *takes pains to do things well* is always most successful. Whoever will turn over straight and even furrows, will do other things equally well; there is no slip-shod farming about him—no broken fences, no giant weeds, no rickety tools, but all is neat and flourishing. Show me the style in which a man plows his fields, and I will tell you whether he is a good or bad farmer.

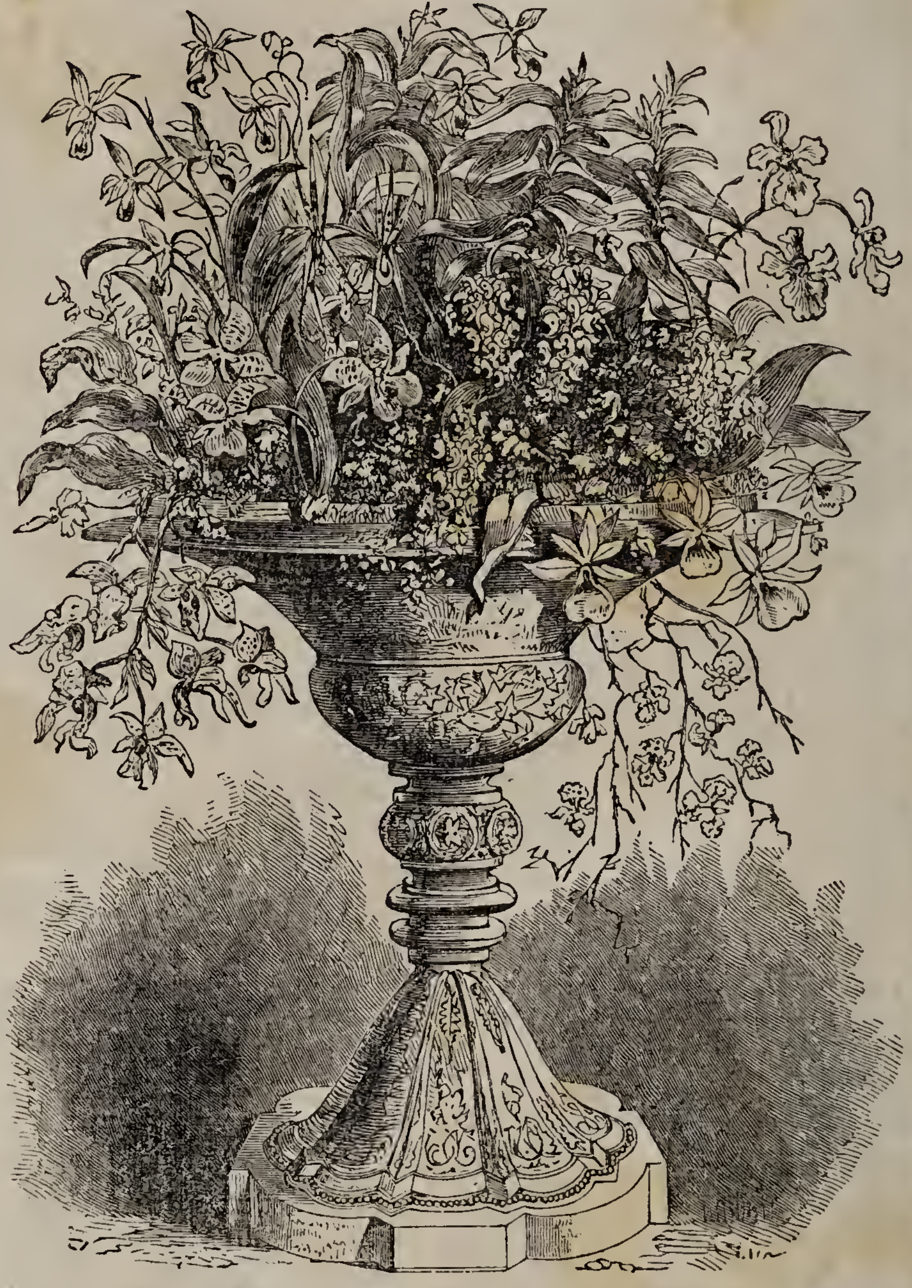
THE CULTIVATION OF FLOWERS.

We once heard a distinguished horticulturist remark, that those who had no love of flowers were deficient in one or more of the phrenological developments, — the mind was incomplete,—and therefore they deserved our pity. The remark was certainly just; for the delicacy, the beauty, and the inimitable pencilings of these gems of the vegetable kingdom, furnish a proof of creative power as well as the mighty machinery of the universe.

"Not worlds on worlds in phalanx deep,
Need we to prove a God is here;
The Daisy, fresh from winter's sleep,
Tells of His hand in lines as clear."

A proper portion of time spent in the cultivation of flowers, with this view before the eye, must therefore tend to refine and elevate the mind, and prove quite as profitable an employment of time, as smoking cigars, playing whist, trotting horses, or bowing down to the shrine of old King Dollar.

Horticultural exhibitions have done and are still doing a great deal to promote a taste for the culture of flowers. Objects so beautifully formed certainly deserve some expenditure of skill in their arrangement for the public eye; a meed they do not always receive. Among the contrivances for this purpose, there is nothing we have seen that appears better than the stand represented in the accompanying figure, copied from an English periodical; and the arrangement here presented has an ease, grace, and variety, contrasting strongly with the stiff, compact, and mathematical vase-bouquets so often seen.



Agricultural Reading. — Milton J. Ross, of Allen Co., Ohio, says that he obtained information from the Albany Cultivator, in relation to making and using manures, that has been worth to him at least *five hundred dollars*.

FAIR DEALING.

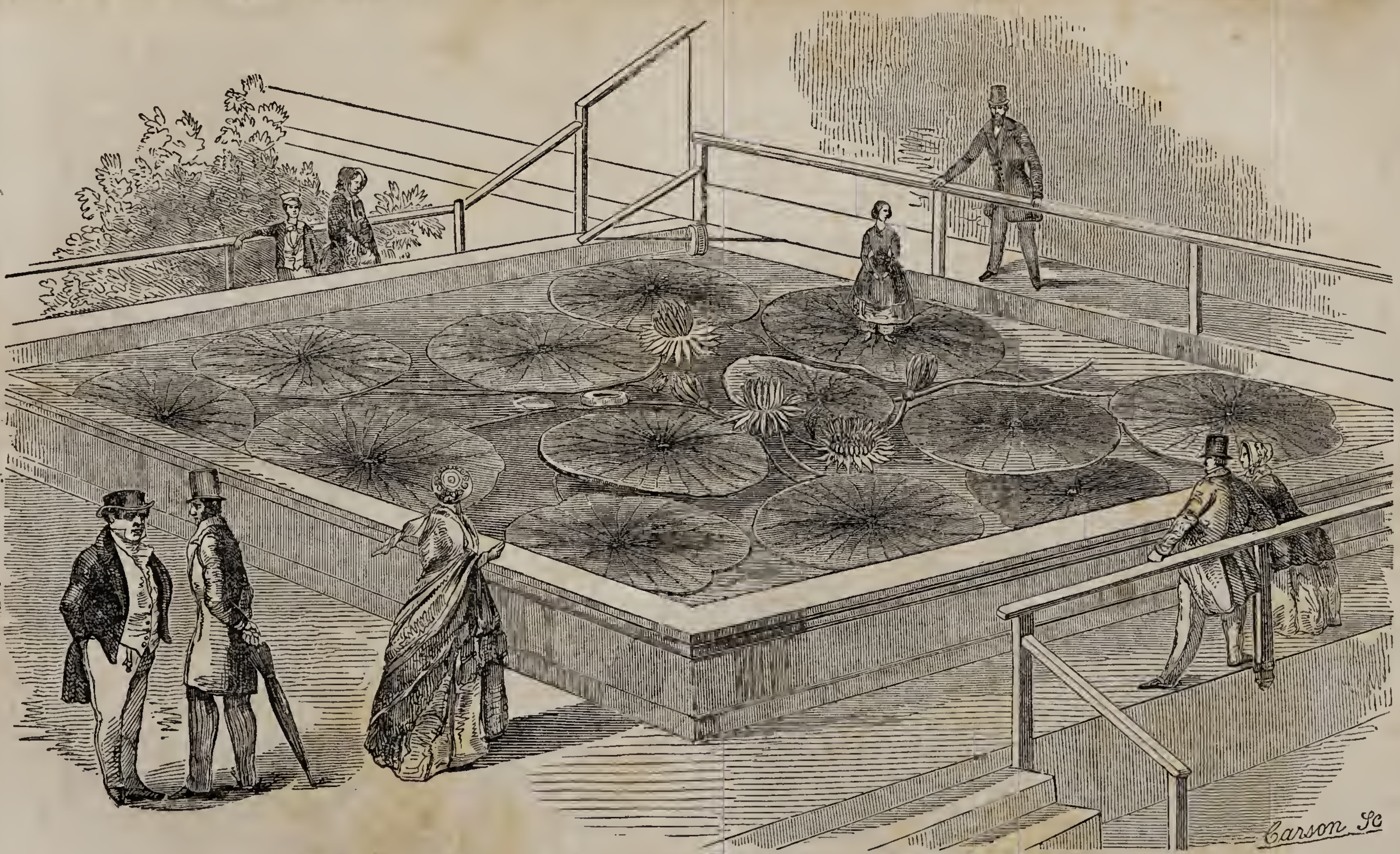
The celebrated *Madame Roland* remarked, that she always heard with pain of any one's making a *good bargain*, because she knew in that case that some other person must have made a *poor* one. This, with the meaning intended, was a very just remark. And, even throwing *principle* out of the scale, it is greatly to every man's advantage to deal fairly. We know a farmer who can always command the very best hands for labor, because he always, as a matter of principle, pays them well and promptly. Another, with an adjoining farm, can only hire the poorest, or those who are unable to get work elsewhere, as all desire to avoid him on account of the petty frauds and acts of unfairness which he shows towards them. He has not learned that "honesty is the best policy."

Hence there is an exception to Madame Roland's remark. For the man who gets the best hands, even though with high wages, makes the *best bargain*. It is a better bargain to buy the best tools, even at a high price, than poor ones at any price. Let every one, therefore, remember, that good bargains are never made, taking the long run, by swindling others; but by managing well and turning every thing to the best advantage. The farmer who drives his business, keeps his farm in fine order, raises no animals but fine ones, and no crops but heavy ones, is ultimately more successful than the most crafty dealer—the truth is, all his operations are a constant succession of good bargains with his capital, and with those who deal with him, without defrauding any one.

SOWING GRASS SEED.

Farmers, as well as other people, like to make good bargains. Some of the worst bargains they make is with themselves. For example,—to save five dollars of seed they lose twenty dollars of hay or pasture. By way of experiment, and to exhibit the advantages of a good supply of seed, the writer sowed in the spring of 1850 a piece of ground to grass, at the rate of one bushel of seed per acre, or half a bushel of clover and the same quantity of timothy. In less than two months, the field afforded a prodigious amount of pasturage,—full twice as much through the season by estimate as ordinary good pastures. The present year the grass was allowed to grow for hay, which has just been cut and drawn in, (7 mo. 10, 1851,) and the product was found to be *three and a half tons per acre*. Where can we find a *permanent* pasture or meadow that will do this? The soil was of ordinary fertility only, or would not probably have yielded more than 25 bushels of corn per acre. The amount of pasturage afforded by the second growth of this grass field, fully warranted the belief that a ton and a half per acre might have been again cut, making *five tons of hay* per acre in all, for one year

The hay produced where plenty of grass-seed is sown, is of much better quality than where the stalks stand thin on the ground.



THE VICTORIA REGIA---THE SOVEREIGN OF WATER PLANTS.

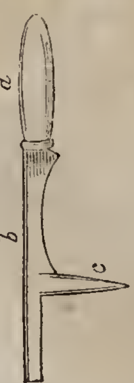
This singular and magnificent plant is found in the tropical regions of South America, with huge massive leaves, four or five feet in diameter, and beautiful flowers of white and pink a foot across. A traveler describes the leaves, when turned up from the surface of the water where they rest, as resembling a large brazen casting lifted fresh out of the mould.

Two years ago, the first plant of the Victoria Regia flowered in England, which was considered a great triumph of art. For, in the first place, it was necessary to build a large hot-house for its especial accommodation; next to give it the temperature of the equator; thirdly, to provide a pond of water for it, kept at a temperature of 85° Fahrenheit; and lastly, and not least, to imitate the motion of a running stream by means of an ingeniously contrived water wheel for this purpose. The past season, one has been made to grow and flower in the open air, by keeping a constant flow of clear warm water into the pond, with a waste pipe to carry off the surplus. A plant has been grown for the first time the present season in this country, in the hot-house gardens of Caleb Cope, of Philadelphia. The engraving represents the plant belonging to the Duke of Devonshire, England.

Driving a great Business.—Dr. Johnson used to say, "He who waits to do a great deal of good at once, will never do any." This is the kind of mistake which some farmers commit. In their zeal to do a great business, they run in debt for large farms, and debt keeps them under water, and they are always working to a disadvantage. With a smaller capital, with industry and independence, they would be much better off in ten years. It is a great deal better to do a little in the best manner, than a great deal superficially and with disorder and confusion.

As modesty is woman's greatest ornament, so the want of it is her greatest deformity.

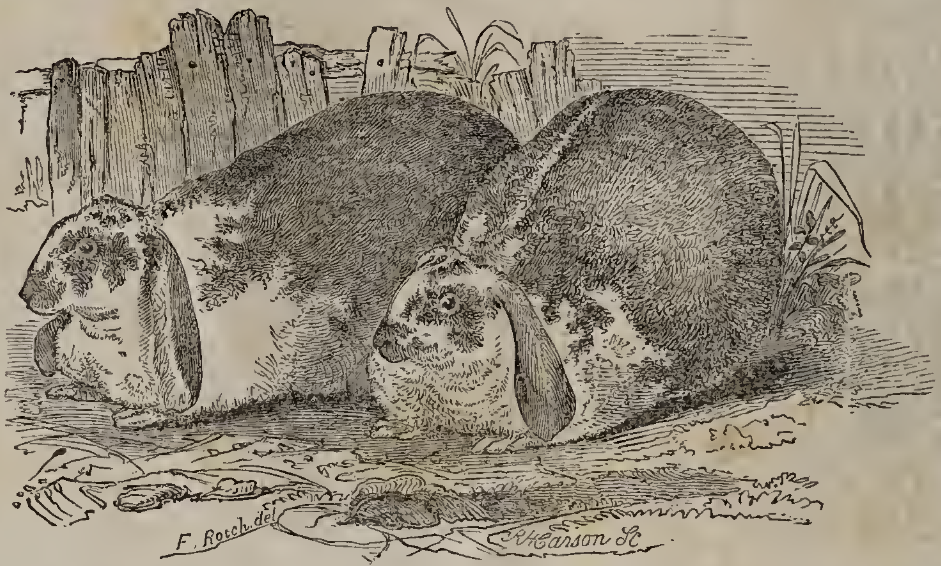
GRAFTING-TOOL FOR ORCHARDS.



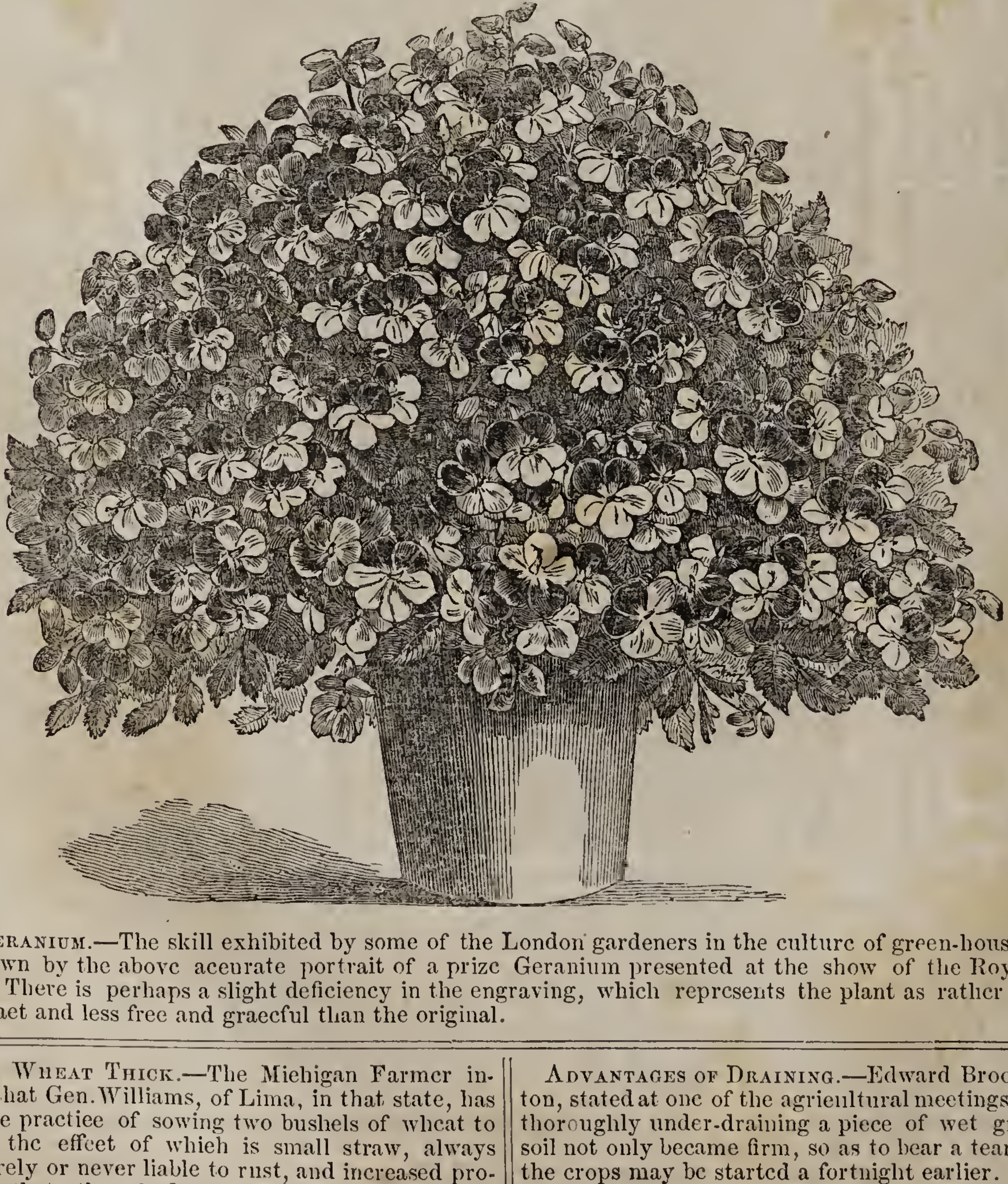
The annexed figure represents a very convenient grafting tool for splitting the stocks in orchard grafting—*a*, the handle—*b*, the blade—*c*, the wedge—*d*, the head to knock it out with, after the grafts are set. The whole need not be more than 9 or 10 inches long, including the handle.

A wise man is like a spring lock, always more ready to shut than open.

FANCY LOP-EARED RABBITS.



Rabbits have from the earliest times been bred as domestic animals, and used more or less as food. Within a few years, however, they have become objects of interest with amateurs, and clubs have been formed in England for breeding them to particular standards, as to size, shape, and color. The variety which has generally been employed by these "rabbit fanciers," as they are called, is said to have been originally obtained from the island of Madagascar, but has been greatly improved in those points which are deemed to constitute beauty, since it has been subjected to the skill of the English breeders. The accompanying cut shows that this variety have very long ears. This feature is considered a great merit by the breeders, and animals have received prizes at the exhibitions of London Metropolitan Rabbit Club, which measured twenty-one inches from tip to tip of the ears. The specimens from which these figures were delineated, belonged to Francis Rotch, Esq., of Morris, Otsego county, N. Y. Animals of this variety grow to a much larger size than the common English rabbit, weighing ten pounds, and sometimes more, each, when dressed. They are excellent as to quality of flesh—are prolific and as easily raised as any.

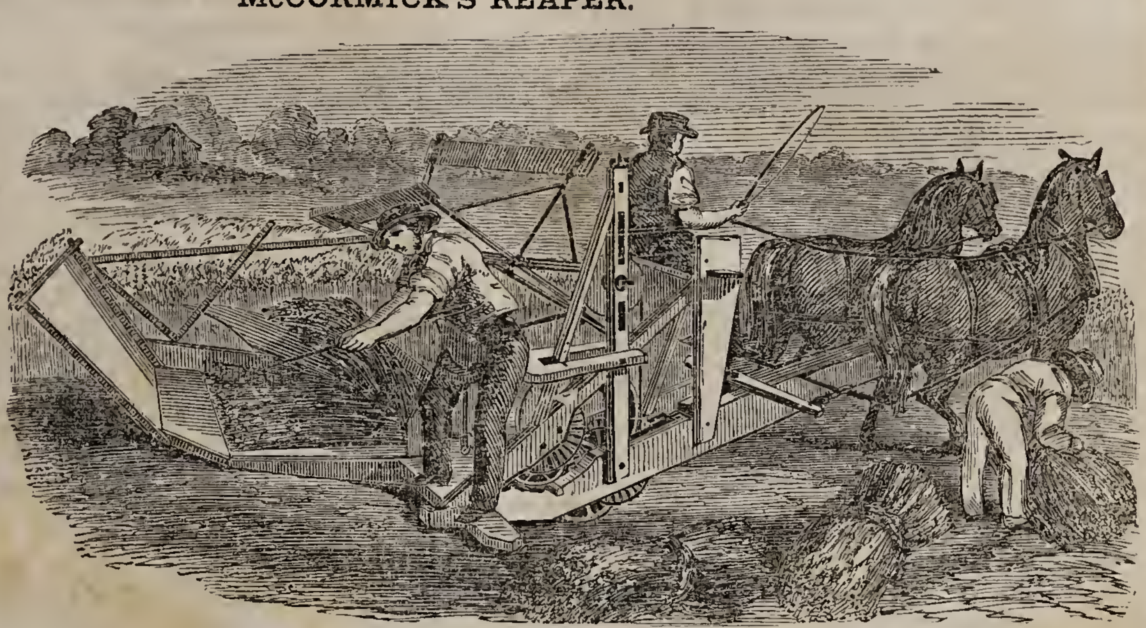


The Geranium.—The skill exhibited by some of the London gardeners in the culture of green-house plants, is finely shown by the above accurate portrait of a prize Geranium presented at the show of the Royal Botanic Society. There is perhaps a slight deficiency in the engraving, which represents the plant as rather more solid and compact and less free and graceful than the original.

Sowing Wheat Thick.—The Michigan Farmer informs us that Gen. Williams, of Lima, in that state, has been in the practice of sowing two bushels of wheat to the acre, the effect of which is small straw, always bright, rarely or never liable to rust, and increased product—and that others had observed a similar result.

Advantages of Draining.—Edward Brooks of Boston, stated at one of the agricultural meetings, that after thoroughly under-draining a piece of wet ground, the soil not only became firm, so as to bear a team, but that the crops may be started a fortnight earlier.

McCORMICK'S REAPER.

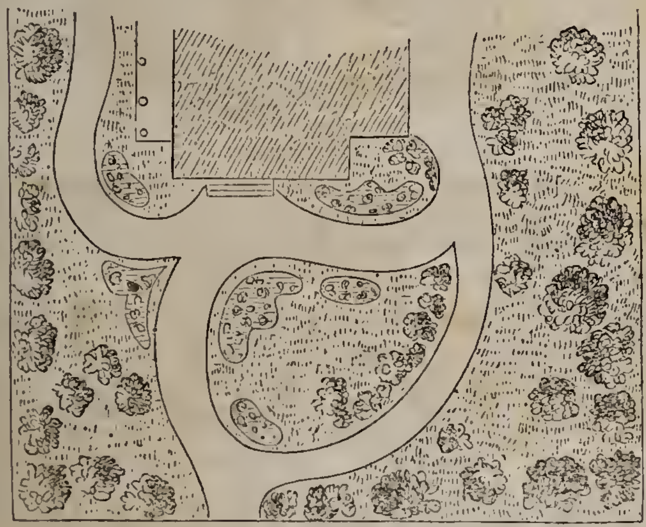


These machines have been successfully used in this country for the last ten years, or longer. A great sensation has been produced in England by their introduction there during the past season. The annexed cut is that of McCormick's Reaper, which received one of the Great Medals at the Exhibition of All Nations. This, as well as Hussey's machine, is coming into extensive use in Gt. Britain. The saving there is computed at $1.25 per acre.

VILLAGE DOOR YARDS.

It is often a cause of regret that so very few of our ornamental grounds approach in finish the highly kept English lawns. Henry Colman, speaking of the latter, says: "Nothing of the kind can be more beautiful; and I never before knew the force of that striking expression of the prince of poets, Milton, of "walking on the smooth shaven lawn;" for it seems to be cut with a razor, rather than with a scythe; and after a gentle shower, it really appears as if the field had had its face washed, and its hair combed with a fine tooth comb."

The truth is, it is hardly desirable to introduce into this country the expense of maintaining such high and costly finish to extensive artificial landscapes. But there is one place where it may very easily be done, with admirable effect and little cost; in the limited front grounds of the village or suburban dwelling. A half hour, spent every morning, before breakfast, by the proprietor himself, would keep the tenth or twentieth of an acre in the highest degree of neatness.



The first of the accompanying plans is intended to embrace about the seventh part of an acre, and to avoid the too frequent and stiff appearance of a straight walk directly from the front gate to the door. In so small a space, shrubs or small trees only can with propriety be introduced, the larger of which should be near the boundary; (and ought to be concealed.) The Norway fir, the Balsam, the Hemlock, and other species of the finest evergreens, which usually attain the height of large trees, may be kept small by shortening in their branches; shearing their surface makes them too stiff and formal. All evergreens, and particularly the hemlock and arbor vitæs, will bear pruning into any shape or dimensions.

The ornamental effect of the grounds is much increased by the introduction of a few flower beds, cut into the turf, as shown in the figures. At the same time, the bad appearance which is some times given by cutting up the whole front yard into beds for flowers, is wholly avoided. No arrangement of grounds should ever be made which dispenses with turf in immediate connexion with the dwelling.

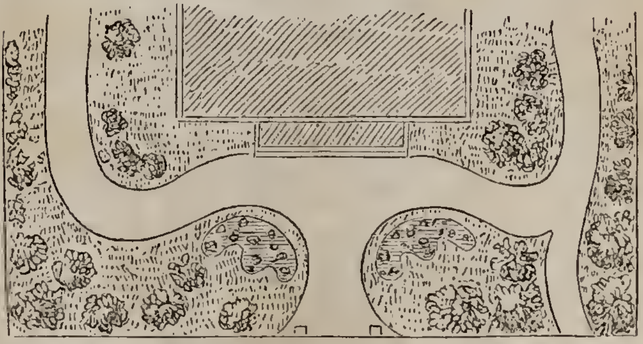


Fig. 2 is intended as a plan for a more limited space. A small inconspicuous gate at the right, opens a direct passage to the kitchen. In both instances, the kitchen garden, if any, occupies the ground back of the house.

A long chapter might be given relative to the selection and suitable disposition of the shrubs, and the flowering plants for the beds. This must be left mainly to the knowledge and taste of the proprietor, or of the person he employs. It may be however observed, that such shrubs should be chosen as will appear well throughout the season, whether in blossom or not; and that if possible, the flowers for the beds should form a constant succession throughout the season. By commencing with the spring flowering bulbs, following those with herbaceous perennials, and closing with the finest annuals, a good succession may be kept up; and if in addition to these, a supply of the most brilliant green-house plants can be procured, the result will be highly satisfactory. It would be desirable in any case, to raise the plants in the back garden, until near the period of flowering, when they should be removed, roots, earth, and all; to the beds. Green-house plants in pots, are very easily and safely set out; and an equal advantage is derived by growing the others in pots for this purpose.

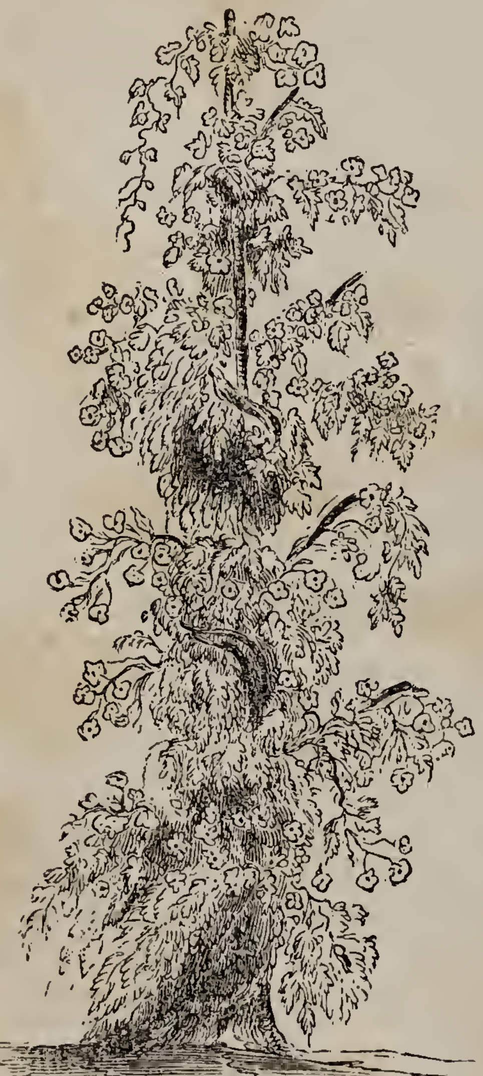
A very few words as to the treatment of the grass: before it is sown the soil should be trenched two or three feet deep if possible, and made rich with manure; this will keep up a fresh green color through the driest summer. The seed may be sown early in the spring; and if at the rate of two or three bushels per acre, it will in a very few weeks form a beautiful carpet of green. It must then be mowed with a lawn scythe, and if the mowing is afterwards continued and repeated as often as *once a week*, not a day less frequent, or as soon as a cut one inch high can be taken off with the scythe, it will soon rival in smoothness the surface of velvet itself.

SUPPORTS FOR CLIMBING PLANTS.

The editor of *The Horticulturist* gives us the following interesting and valuable hints on the supports for honeysuckles and climbing roses, with the first of which we have been long familiar, and have never, in all the highly finished, carved, and painted supports, ever seen its equal:

"How to make *arbors* and *trellises* is no mystery, though you will no doubt agree with us, that the less formal and the more rustic the better. But how to manage single specimens of fine climbers, in the lawn or garden, so as to display them to the best advantage, is not quite so clear. Small fanciful frames are pretty, but soon want repairs; and stakes, though ever so stout, will rot off at the bottom, and blow down in high winds, to your great mortification; and that too, perhaps, when your plant is in its very court dress of bud and blossom.

"Now the best mode of treating single vines, when you have not a tree to festoon them upon, is one which many of you will be able to attain easily. It is nothing more than getting from the woods the trunk of a cedar tree, from ten to fifteen feet high, shortening in all the side branches to within two feet of the trunk, (and still shorter near the top,) and setting it again as you would a post, two or three feet deep into the ground.*



CLIMBING PLANTS ON CEDAR TREES.

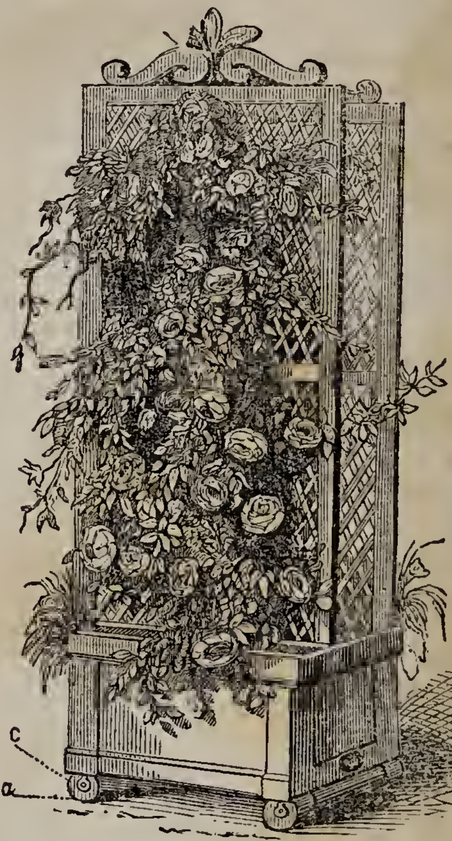
"Cedar is the best; partly because it will last forever, and partly because the regular disposition of its branches forms naturally a fine trellis for the shoots to fasten upon.

"Plant your favorite climber, whether rose, wistaria, or honeysuckle, at the foot of this tree. It will soon cover it, from top to bottom, with the finest pyramid of verdure. The young shoots will ramble out on its side branches, and when in full bloom, will hang most gracefully or picturesquely from the ends.

"The advantage of this mode is, that once obtained, your support lasts for fifty years; it is so firm that winds do not blow it down; it presents every side to the kindly influences of the sun and air, and permits every blossom that opens, to be seen by the admiring spectator. How it looks at first, and afterwards, in a complete state, we have endeavored to give you a faint idea in this little sketch.

"What shall those of us do who have neither cottages nor gardens?—who, in short, are confined to a little front and back yard of a town life, and yet who love vines and climbing plants with all our hearts?

"That is a hard case, truly. But, now we think of it, that ingenious and clever *horticulteur*, Monsieur Van Houtte, of Ghent, has contrived the very thing for you.* Here it is. He calls it a "Trellis Mobile;" and if we mistake not, it will be quite as valuable for the ornament and defence of cities, as the *Garde Mobile* of the Parisians. It is nothing more than a good strong wooden box, upon wooden rollers. The box is about three feet long, and the double trellis may be eight or ten feet high. In this box, the finer sorts of exotic climbers, such as Passion Flowers, Everblooming Roses, Maurandias, Ipomea Learii, and the like, may be grown with a charming effect. Put upon wheels, as this itinerant bower is, it may be transported, as Mr. Van Houtte says, "wherever fancy dictates, and even in the apartments of the house itself." And here, having fairly escorted you back to your apartments, after our long talk about out-door drapery, we leave you to examine the *Trellis Mobile*, and wish you a good morning."



MOVABLE TRELLIS.

Number of Plants Eaten by Different Animals.—It has been calculated that

The Cow	eats	276	plants, and rejects	218
Goat	do	449	do	126
Sheep	do	387	do	141
Horse	do	262	do	212
Hog	do	72	do	271

English and Scotch Acres.—The English acre contains 4,840 square yards—the Scotch, 6,150. The Scotch acre, therefore, is rather more than one-fourth the largest.

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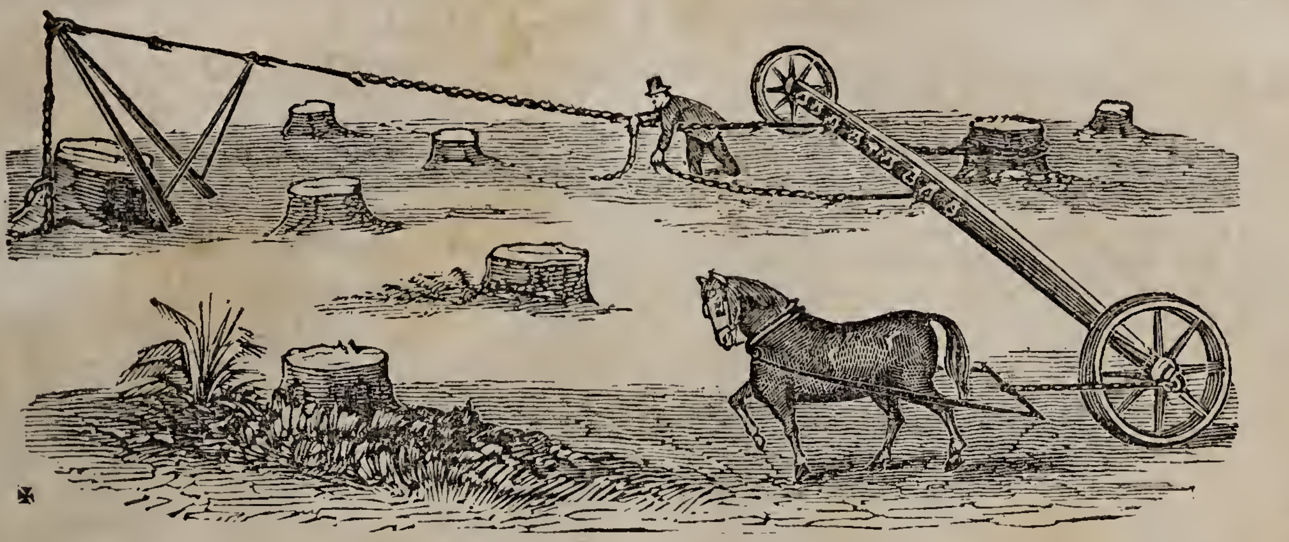
* We owe this hint to Mr. Alfred Smith, of Newport, a most intelligent and successful amateur, in whose garden we first saw fine specimens of this mode of treating climbers.

* Flore des Serres

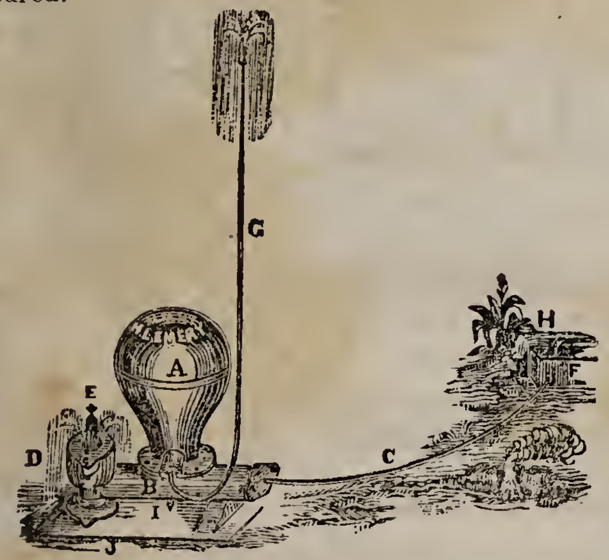


STEWART'S PATENT STUMP-PULLER

For some time after land is cleared from the forest, the stumps of trees present obstacles to cultivation. Hardwood stumps rot out in a few years, or become so far decayed that they may be pulled out by horses or oxen, aided by levers. Pine and hemlock are longer in rotting, and from their numerous and extensive roots, are a much greater impediment to the plow. Various machines have been made to get out stumps. An objection to many is that they are cumbersome and unweildy, being difficult of transportation from place to place; an objection to others is, that their cost is too great for many farmers. The one here represented, combines the advantages of simplicity and portableness with comparative cheapness. The cost varies according to the size and power of the different articles—they being designed to possess a "purchase" of 250 to 1000 tons, and are sold at $50 to $200 each—the size in most common use costing the former sum. The operation of the machine is very simple, and may be readily understood from the cut, by persons who have only only a moderate share of mechanical knowledge. A single horse is generally used for working the machine, and this force is sufficient for most stumps, but some of extraordinary size may require an additional horse, or instead of horses, a yoke of oxen. The average length of time required for pulling each stump, is said to be about five minutes. Wm. W. Willis, Orange, Mass., is the proprietor of the patent.

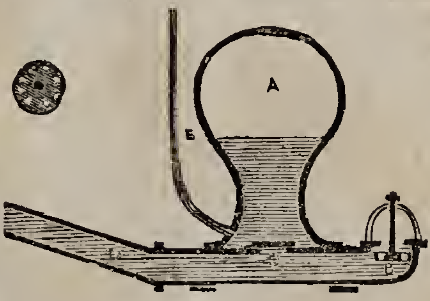
IMPROVED HYDRAULIC RAM.

H, spring or brook. C, drive or supply pipe, from spring to ram. G, pipe conveying water to house or other point required for use. B, D, A, E, I, the ram. J, the plank or other foundation to which the ram is secured.



Comparatively few of those for whose benefit this contrivance is designed, have as yet become aware of its great utility. Although the law upon which it works is one of the most common in nature, and although it has been known in some form or other for 2,000 years, yet a kind of mystery has always hung about it. The seeming absurdity of the idea that water may be made to elevate itself above its level, and to supply a constant and abundant stream at any desired height, without the liability to accidents and stoppages, has prevented inquiry into the construction of the hydraulic ram, and it has consequently remained almost unknown, and until a few years, little used.

Description.—The annexed cut represents a vertical section of the ram. A, the air chamber—B, the waste valve—C, valve opening into the air chamber—D, the feed or driving pipe—E, pipe to convey the water where it is desired. The pipe D, should be 30 to 50 feet long, and from one to two inches calibre; the pipe E any length desired, and about half an inch calibre; lead pipe is commonly used. — The circular figure on the left represents the form of the waste valve. The waste valve is made to vibrate up and down thus: — the water passes down the driving D, and escapes at the waste valve B. Now, as any descending body increases in velocity and force every instant of its descent, the column of water descending in the driving pipe, quickly attains sufficient velocity and force to lift the waste valve, but the valve in rising instantly stops the passage, and the whole momentum of the water strikes against it and seeks relief, which is only found at the valve C, through which a quantity of water is forced into the air chamber, where it is confined by the closing of the valve. The momentum being thus expended, and the water at rest, the valve B. drops by its own gravity, and is ready to start again. After repeated vibrations, the air chamber becomes partly filled with water, compressing within a small space the air, which by its elasticity reacts upon the water, and forces it up the pipe E to any desired elevation or distance.



Many a farmer has a good spring or stream of water in the vicinity of his buildings, which would be to him invaluable if it could be brought to the house and barn; but being at a distance, and below the level of his buildings, it cannot be done by the ordinary means of conveying water; to such the ram becomes one of the most useful contrivances that ingenuity and science has ever furnished. Faithfully performing its work, unattended and unnoticed, with constant and regular pulsations as of life, it presents one of the most beautiful and interesting achievements that the mind has ever obtained over matter.—*Catalogue of Emery & Co., Albany.*

DESIGN FOR A SMALL VILLA.

This very remarkably neat and tasteful design of a country dwelling, is copied from the Horticulturist, and represents the residence of L. B. Brown, of Rahway, N. J. It was designed by A. J. Davis, of New-York. We copy the annexed notice from the Horticulturist:

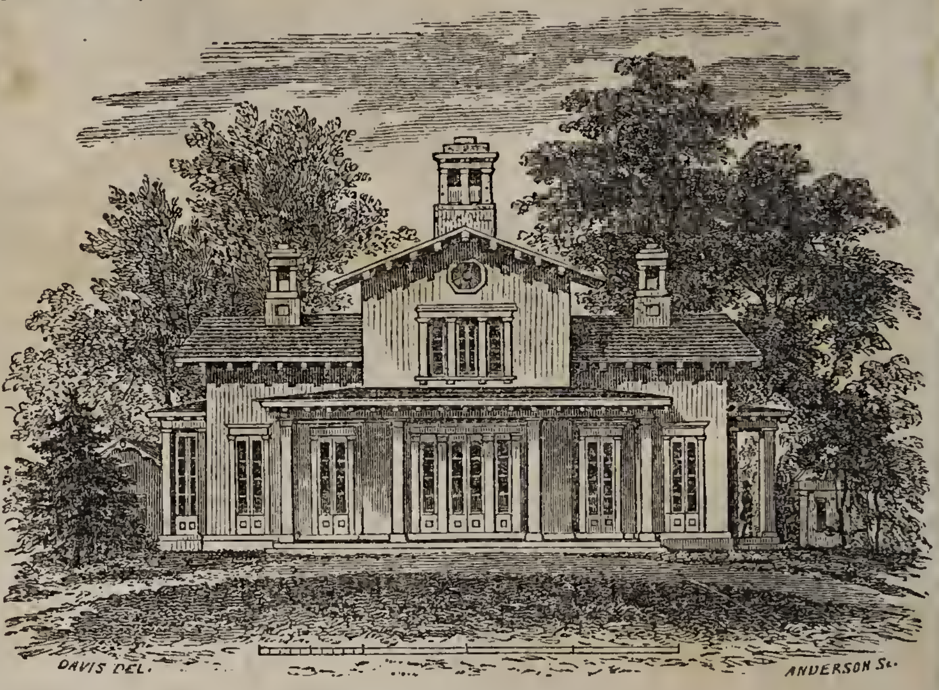
"It is an excellent example of economical arrangement; and we scarcely remember an instance where so good an effect, joined to so much comfort and convenience, has been produced at so moderate a cost.

"The plan of the principal floor shows, besides the entry, a parlor, a saloon, a dining-room, a kitchen, and a pantry. Not an inch of space is lost; and the management of the stairs and passages in the second story, is so complete that six good bed-rooms are afforded.

"The exterior, without making pretensions to ornamental effect, is well composed; the proportions are good, the style is well expressed, and the whole is altogether satisfactory to the eye and the judgment.

"The veranda, which extends along the front of the building, gives an expression of great comfort to every house, in a climate where shelter and repose are so necessary, in certain hours of the day, as in the middle states, and where a veranda is therefore as indispensable as almost any apartment in the dwelling.

"We think there are few examples existing in this country of a cottage villa containing so much accommodation, and in so unexceptionable a taste, for the moderate sum of $2,300,—the cost of this design as completed at Rahway.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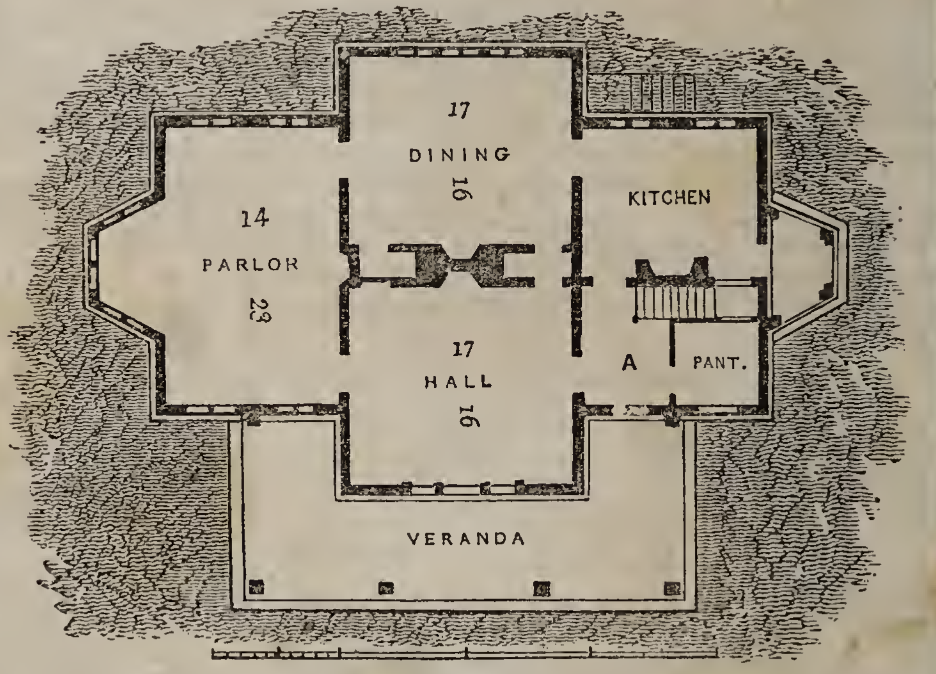


First Floor.

Protection against the Curculio.—We have heard of some instances where the fumigation of trees with brimstone, seemed to protect plums from this insect. Mr. J. R. Howard informs us that Mr. C. H. Hall of Bluerock, Ohio, has for several years pursued the following with advantage: "He melts sulphur, and dips in it woolen rags, which are tied to the end of a pole, and at twilight he fumigates the trees. This he does twice a week, and it is so offensive, that the insects leave the orchard. The practice has always been successful.

PINE-APPLE CHEESE.

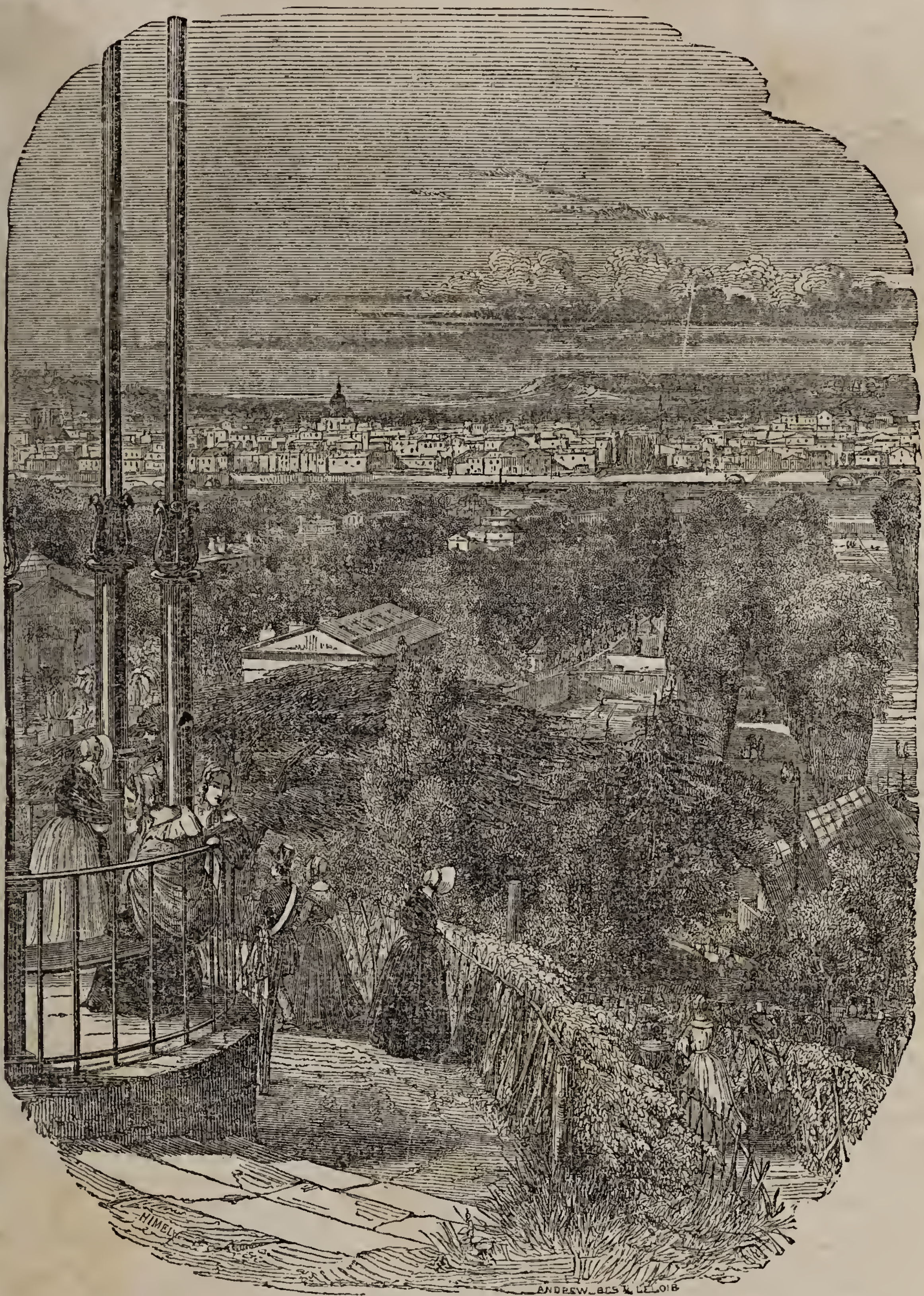
A summary of the mode of making this cheese, as practiced by Mr. Robert Norton, of Rushford, Allegany county, N. Y., is given in the journal of the N. Y. State Ag. Society, from which we take the following. It appears that Mr. N. is from Goshen, Ct., and he is probably a relative of Mr. Lewis M. Norton, of that place, who was the first manufacturer of pine-apple cheese in this country. The particulars of his mode were given in the Cultivator for 1845, page 283.

"His curd is kept until its age brings it into the same chemical state that is produced by a thorough scald; after which it is cut into pieces one inch long and three-eighths of an inch square, by a machine which works up 20 lbs. per minute; after this it is warmed by water to 90°, and salted at the rate of 1 lb. of salt to 50 lbs. of curd. The pine-apple cheeses are at first pressed smooth with a neck projecting from the lower end, to which the pressure is applied. The impression is made by a net, which is stretched on by a screw, after softening the cheese in hot water. This toughens the rind and insures the cheese a safe arrival after a long voyage. The Norton cheese is in very great demand by California shippers. The shipping cheeses weigh about 10 lbs. each, and are pressed in tin hoops, in perpendicular columns, containing nine cheese each."

WASHING FLUID.

Take one pint alcohol, one pint spirits turpentine, two ounces ammonia, (hartshorn,) one ounce camphor gum; mix all together, and bottle—cork tight—shake before using.

Directions for using.—For every five gallons of water, about milk-warm, add one pint of soft soap; then put in three table spoonfulls of the preparation. Soak the white clothes thirty minutes; then rinse or wring them out, rubbing them where the most dirt appears. Then put them into clear, cold water, without soap, and boil thirty minutes, and rinse them in clear cold water. The same preparation will answer for colored flannels and calicoes. Soak them thirty minutes, rub and wring them out. Then pass them through the water in which the white clothes were boiled, which will cleanse them sufficiently for rinsing.

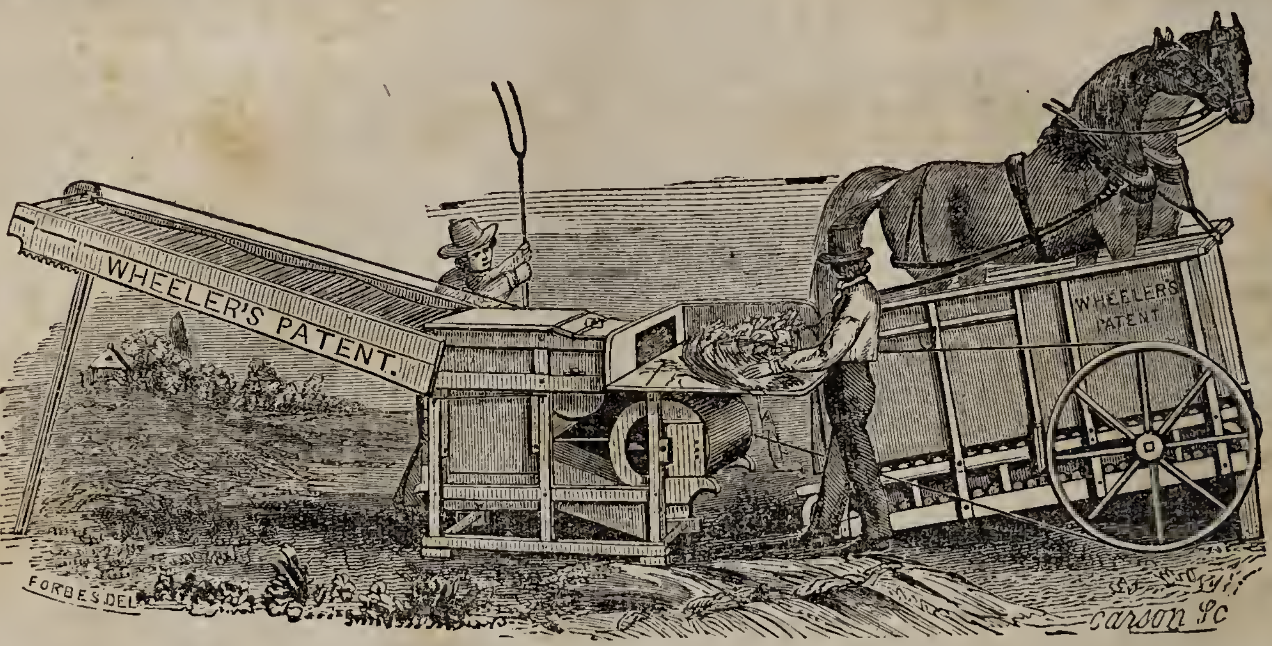


THE JARDIN DES PLANTES.

The great public or government gardens at Paris, contain an extraordinary collection of the natural productions of the earth, including besides plants and forest trees, animals from all quarters of the globe, birds, minerals, collections in comparative anatomy, and indeed every department of natural science. It affords unequalled facilities for the study of these sciences; and our own government and people might well attempt to imitate the liberality shown in some parts of its management. The garden itself is open to all. There is an amphitheatre with a laboratory and apparatus for public lectures, which are given gratuitously, on every branch of science for more than half the year. The money expended freely and willingly by the United States, in driving out or exterminating a single tribe of Indians, would set up half a dozen such institutions as the Garden of Plants at Paris. We leave it to the good sense of American citizens, which would be the most useful to all parties concerned.

The view here given is from the summit of a high elevation, which is ascended by a winding path, bordered by close hedges. On the top is a pavilion with seats. In front and immediately below, is a large cedar of Lebanon, more than a hundred years old, and with a trunk over a yard in diameter. Beyond this is seen the buildings and yards for the wild animals; exotic plants on the left, and a long avenue of lindens on the right; and still further is an extensive view of the city of Paris.

Talking.—The best rules to form a young man are, to talk little, to hear much, to reflect alone upon what has passed in company, to distrust one's own opinions, and value others that deserve it.



COMBINED THRESHER AND WINNOWER.

THE above cut represents a very simple, compact, and efficient apparatus for threshing and cleaning grain at one operation. The winnowing apparatus may be fitted to powers of either one or two horses; the cut represents the latter, and with this power the machine is capable of getting out 150 bushels of wheat, or 300 bushels of oats in a day. The number of hands required depends much on the facilities for working the machine, the convenience of feeding, and the room for disposing of the straw. At a trial lately made with mowed oats, which were not in the best order, it worked at the rate of 40 bushels an hour—cleaning the grain in a thorough manner—the number of hands employed being four men and two boys. It is made by Messrs. WHEELER, MELICK & Co., Albany.

METHOD OF CURING PRIZE HAMS.

THE hams of Maryland and Virginia have long enjoyed a wide celebrity. At the last exhibition of the Maryland State Agricultural Society, four premiums were awarded for hams. We are informed by those who had the opportunity of examining them, that they were of first rate quality. The following are the recipes by which the hams were cured:

T. E. HAMBLETON'S RECIPE—1st premium. To every 100 lbs. pork, take 8 lbs. of G. A. salt, 2 oz. saltpetre, 2 lbs. brown sugar, 1½ oz. of potash, and 4 gallons of water. Mix the above, and pour the brine over the meat, after it has laid in the tub some two days. Let the hams remain six weeks in brine, and then dried several days before smoking. I have generally had the meat rubbed with fine salt when it is packed down. The meat should be perfectly cool before packing.

J. GLENN'S RECIPE—2nd premium. To 1,000 lbs. of pork, take half a bushel and half a peck of salt, 3 lbs. saltpetre, 3 lbs. sugar, and 2 quarts of molasses. Mix; rub the bacon with it well; keep on for three weeks in all, but at the end of nine days take out the hams, and put those which were at the top, at the bottom.

R. BROOKE, JR'S, RECIPE—3d premium. One bushel fine salt, half bushel ground alum salt, one and a half pounds saltpetre to the thousand lbs. pork, left to lie in pickle 4 weeks, hung up and smoked with hickory wood until the rind becomes a dark brown.

C. D. SLINGLUFF'S RECIPE—4th premium. To 100 lbs. green hams, take 8 lbs. G. A. salt, 2 lbs. brown sugar or molasses equivalent, 2 oz. saltpetre, 2 oz. pearl ashes, 4 gallons water, dissolve well, skimming off the scum arising on the surface. Pack the hams compactly in a tight vessel or cask, rubbing the fleshy part with fine salt—in a day or two pour the above pickle over the meat, taking care to keep it covered with the pickle. In four to six weeks, according to the size and weight of the hams, (that is to say, the longer period for heavy hams,) hang up to smoke, hock up; smoking with green hickory wood. I have put up hams for the last 12 or 15 years by the above recipe with uniform success, equal at all times to the sample now presented.

To the above we add the following, which we, as well as many others have satisfactorily proved:

For every one hundred pounds of meat, take five pints of good molasses, (or five pounds of brown sugar,) five ounces saltpetre, and eight pounds rock salt—add three gallons of water, and boil the ingredients over a gentle fire, skimming off the froth or scum as it rises. Continue the boiling till the salt, &c., is dissolved. Have the hams nicely cut and trimmed, packed in casks with the shank end down, as the pickle will thus strike in better. When the pickle, prepared as above, is cooled to blood heat, pour it over the hams. They may lie in pickle from two to six weeks, according to the size of the pieces, or the state of the weather, more time being required in cold, than in warm weather. Beef or mutton hams, intended for smoking and drying, may be cured according to this mode, and will be found excellent.

Much of the goodness of hams depends on smoking. They should be hung at such a distance from the fire, as not to be heated. They should also be hung up with the shank end downward, as this will prevent the escape of their juices by dripping. Small hams, wanted for immediate use, will answer with two weeks smoking, but large ones, and those wanted for keeping, should be smoked four weeks or more.

CREAM CHEESE.

TAKE one quart of very rich cream, a little soured, put it in a linen cloth and tie it as close to the cream as you can. Then hang it up to drain for two days—take it down, and carefully turn it into a clean cloth, and hang it up for two more days—then take it down, and having put a piece of linen on a deep soup-plate, turn your cheese upon it. Cover it over with your linen; keep turning it every day on to a clean plate and clean cloth until it is ripe; which will be in about ten days or a fortnight, or may be longer, as it depends on the heat of the weather. Sprinkle a little salt on the outside, when you turn them. If it is wanted to ripen quick, keep it covered with mint, or nettle leaves. The size made from a quart of cream is most convenient, but if wished larger, they can be made so.

Bitter and useless experience is too little for the mind, but too much for the heart.

LABOR-SAVING MACHINES AND IMPLEMENTS.

There is no country in the world where manual labor bears so high a price in proportion to the value of agricultural products, as in the United States. This is a strong reason why farmers should endeavor to lessen the cost of production by the use of labor-saving implements. Considerable progress has, in fact, been made in this direction within a few years, though such implements and machines are by no means so generally adopted as good economy would dictate.

Harvesting Machines.—In the principal grain-growing districts, these machines are of immense value. In some instances they enable the farmers to secure their crops at the proper season and in good order, when without them it would be entirely impracticable to prevent the loss of a greater portion on account of the scarcity of hand labor. The *Prairie Farmer* estimates that probably not less than 3,500 new reaping machines were put in use in the north-west the past season—equal to the labor of 17,500 men. The credit of simplifying these machines, and bringing them into successful operation, belongs to American mechanics; though they were first tried, (but not practically introduced,) in England. They can be used in any clear ground, if the surface is not very irregular. Regular undulations, or large swells, do not materially affect their operation. Hussey's, manufactured by O. Hussey, Baltimore, Md., and McCormick's, manufactured at Chicago, Ill., and other places, are the kinds in most extensive use. A machine will cut from sixteen to eighteen acres in a day. The force required to operate them, is two horses and two men—one of the men to drive the team, and the other to rake off the grain from the machine and leave it in heaps. A gentleman who has lately seen McCormick's machines in operation, says—"I could not but admire the perfect manner in which the wheat was cut and laid,—it being all cut *very even*, and about six inches from the ground."

Mowing Machines.—A machine similar to the machines above described, has been used, to some extent, for cutting grass. We are informed that it answers well for timothy, or grass that has not much fine herbage at bottom, but is liable to clog in fine, thick grass.

Machines for sowing grain, both in drills or rows, and broadcast, are used to considerable extent in Western New-York. The broadcast machines are capable of sowing any kind of grain, grass seed, plaster, ashes, bone-dust, guano, lime, &c., more evenly than they can be sown by hand. The force required is a horse and man—the latter riding on the machine and guiding the horse. It will sow twenty acres in a day. A machine of this kind, which has given good satisfaction, is made by P. Seymour, East Bloomfield, Ontario county, N. Y., and costs $45.

But the practice of sowing wheat in *drills*, is every year gaining favor, and this system of sowing is destined to become general. In England the system is already so well established, that it has been pronounced the "sheet-anchor of wheat husbandry." English and Scotch machines have been introduced into this country, and have been improved as regards simplicity of construction and cheapness. Several kinds are used, as Palmer's, Graggs & Reynolds', Sherman's and Seymour's. Their cost is from $55 to $80. These machines will sow any kind of grain with great exactness, and the seed deposited to the acre may be regulated to any quantity, from half a bushel to four bushels. The space between the rows for wheat, is nine to ten inches, and the seed is deposited from one and a half to two inches deep. A man and horse will sow twelve acres in a day.

Horse-rakes.—One of these implements, one man and a horse will perform the work of ten men. The revolving wooden rake is most generally used. Its cost is from eight to ten dollars. Spring-tooth wire rakes have been tried, but are liable to the objection of making the hay gritty, from their scratching the ground so hard. A rake of somewhat new form, called "Delano's Horse-rake," has been introduced, and is highly spoken of by those who have used it. It is attached to an axletree, with wheels. Each tooth has a separate joint at its upper end, by which it is readily raised over stones or stumps. From the independence of the teeth, it also adapts itself to the surface of the ground, under any circumstances, and for this reason is approved for uneven fields, where the common revolving rake does not answer.

Cultivators.—What are called "field cultivators," are extensively used for working fallows. They are supported on wheels, and drawn by horses or oxen attached to them by means of a tongue. The teeth are made to penetrate the ground from two to five inches, by a graduating apparatus to which the frame in which they are placed is attached. The best teeth are made of cast-steel. These implements work the ground rapidly, and clean and loosen the soil in very perfect manner. A good team will go over ten to twelve acres in a day.

KIND WORDS—USE THEM.

Because they fall pleasantly on the ears of all to whom they are addressed, and is therefore one of the ways of promoting human happiness.

Because they give an impression in your favor, and thus prepare the way for your greater influence over others for good.

Because kind words powerfully contribute to soothe and quiet your own spirit when ruffled by the unkindness of others.

Because they show the difference between you and the rude, malicious, or revengeful, and are suited to show them their wrong.

Because they are suited to stir up the kind affections of your own heart. There is sweet music in such a voice rightly to affect the soul.

Because they are so uncommon, use them that there may be more of such bright stars in our dark firmament.

Because they aid in carrying out the divine injunction, "Be courteous," "Be kindly affectionate one to another."

Because you cannot conceive of any truly benevolent being who would not use them.

Because you have heard such words from your God, and hope to hear such words forever.—*American Messenger.*

DON'T FRET.

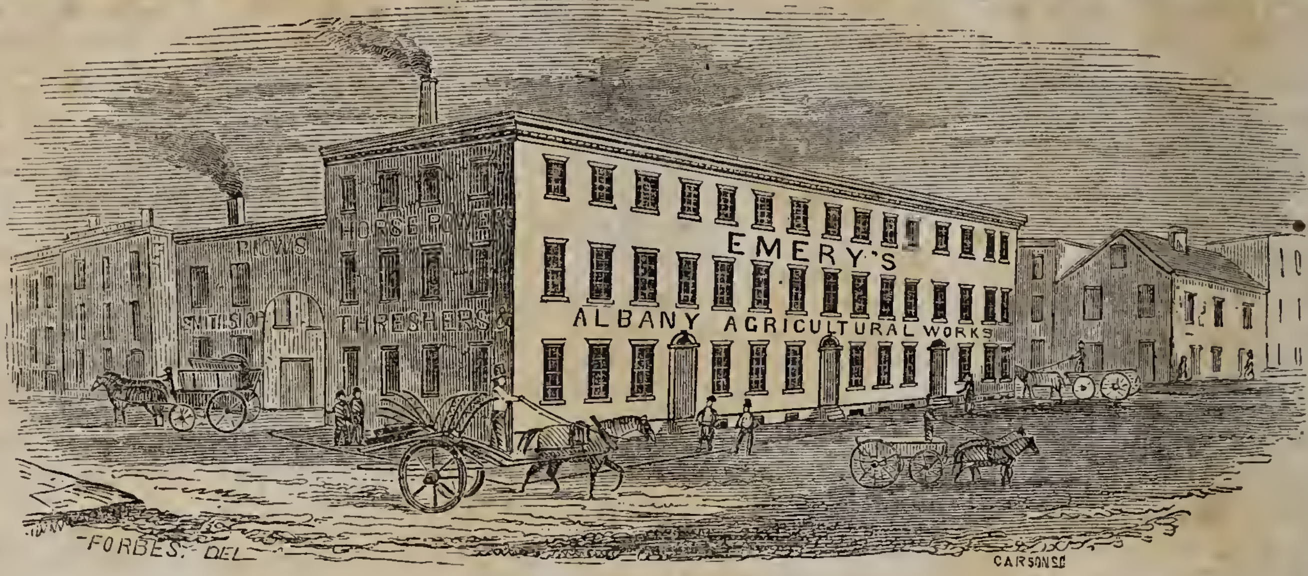
It is unamiable. A fretting man or woman is one of the most unlovely objects in the world. A wasp is a comfortable housemate in comparison—it only stings when disturbed. But an habitual fretter buzzes if he don't sting, with or without provocation. "It is better to dwell in the corner of a house top than with a brawling woman and in a wide house."

It is useless. It sets no broken bones, stops no leaks, gathers no spilt milk, cements no smashed pictures, cures no spoilt hay, and changes no east winds. It affects nobody but the fretter himself. Children or servants cease to respect the authority or obey the commands of a complaining, worrisome, exacting parent or master. They know that "barking dogs don't bite," and fretters don't strike; and they conduct themselves accordingly.

Striking Illustration.—At the Agricultural Convention held in Boston in March last, the presiding officer, Hon. M. P. Wilder, in the course of an able speech showing the advantage of improving agriculture, gave the following example: "We have 150,000 cows in this Commonwealth. Suppose science enable these, or improved breeds, to yield *one* additional quart of milk per day, this, at three cents per quart, would increase the productive capital of the state $4,500 per day, or $1,642,500 per year; or if two quarts per day, a gain of more than *three millions of dollars* annually."

No man has ever regretted that he was virtuous and honest in his youth, and kept aloof from idleness.

EMERY & COMPANY'S
ALBANY AGRICULTURAL WORKS,



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PREMIUM RAIL-ROAD HORSE POWER,

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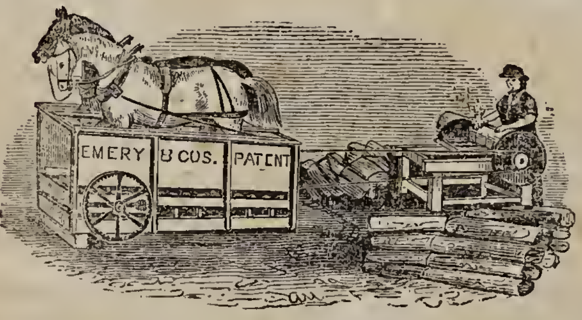

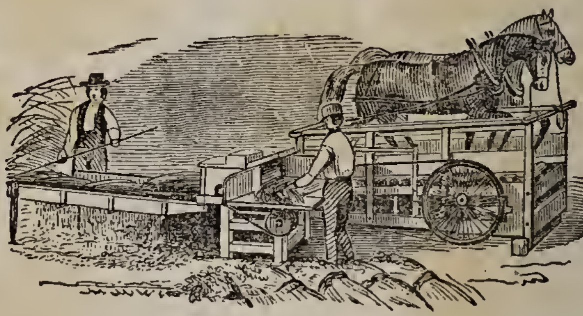

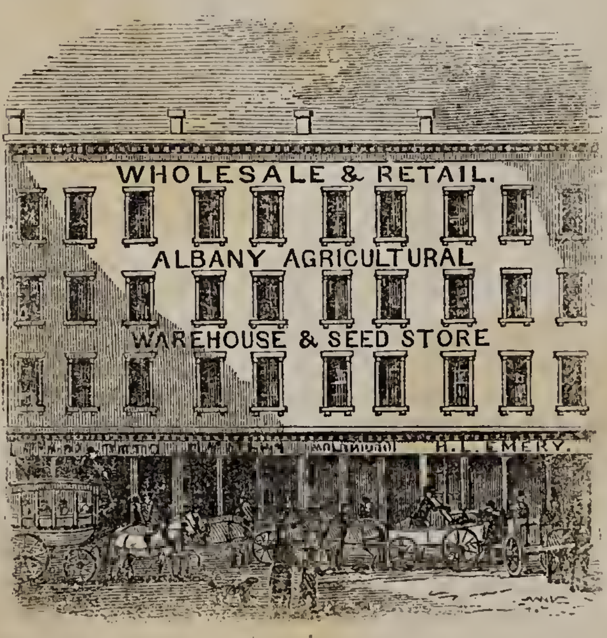
WHOLESALE & RETAIL.
ALBANY AGRICULTURAL
WAREHOUSE & SEED STORE
H. L. EMERY.

THIS Horse Power has received the HIGHEST PREMIUMS as also the most favorable commendations of committees at the FAIRS of the NEW YORK STATE AGRICULTURAL SOCIETY at ALBANY in 1850, and at ROCHESTER in 1851; also at the STATE FAIR of MICHIGAN in 1851. In each of the above cases, the competition was greater than usual, and embraced every *Rail-way Horse Power* of any considerable note in the country—among which were WHEELER'S (*Rack and Pinion*), and many others. They have also been exhibited at the STATE FAIRS of OHIO, MARYLAND, and PENNSYLVANIA, and nearly *all the County Shows in New York State*, the past season, with like success, excepting in cases when regulations of societies prevented the awarding of premiums to them.

The demand for them has exceeded the most sanguine anticipations of the proprietors and notwithstanding over five hundred sets have been completed and sold since May 1851, not half of the demand has been supplied. Their arrangements for the coming season will enable them to turn off double the amount, with which they hope to supply all orders in good time. They also manufacture the Over-Shot Threshing Machines, with Separators and Cleaners, which with the latest improvements, are believed to excel any before sold by them, or any others now before the public; also Saw-Mills for various uses for Horse Power; Seed Planters for all kinds of Seeds, in hills or drills, and numerous other Implements. As Manufacturers and Dealers, Wholesale and Retail, in Agricultural Implements, Machines, and Seeds, they stake their reputation upon the real merits of their articles, all of which are warranted to give satisfaction, or may be returned.

ALBANY AGRICULTURAL WAREHOUSE AND SEED STORE,

Nos. 369 & 371 BROADWAY, ALBANY, N. Y.

For prices, terms, description, &c., see Catalogue, furnished *gratis*, on application to } **EMERY & CO.,** Sole and Original Proprietors.

THE CULTIVATOR.

TO IMPROVE THE SOIL AND THE MIND.

NEW SERIES. ALBANY, JANUARY, 1852. VOL. IX.—NO. 1.

Plowing up Hidden Treasure.

It has been said that "we may judge of the skill of a farmer by the number of sovereigns he pockets by the end of the year;" and as the whole object of the business is to reap its reward, the inquiry very naturally arises, "What is the secret why some farmers with the same amount of capital and labor, gain more than others, and why some work hard all their lives without seeming to turn up with their shares but little that is valuable?"

The answer is obvious—all do not know where the concealed treasures lie, which the more fortunate have discovered,—and having discovered, immediately commence throwing out freely from the bottom of their rich furrows. It is surprising what mines of wealth lie within reach of some who are toiling laboriously for what these mines would at once afford them. We have known a very industrious man draw stable manure from a distance of several miles, to apply to the surface of land, that contained just twelve inches below, powerful means of fertility. The manuring was indeed highly profitable, but a great mistake was committed by neglecting the other means. Another farmer in one of the best counties of Western New-York, told us years since, that so valuable was the subsoil of his land, that he would be glad to have half a foot of the top soil of his whole five hundred acres at once removed and taken away. But his knowledge has slumbered; for to this day, neither subsoil nor trench plow has entered beyond the usual depth.

Accidental occurrences often teach valuable facts, of which the successful farmer at once avails himself. During one of those years when the wheat-crop was nearly destroyed by adverse causes, a strip of land was observed through a neighbor's field, bearing a fine dense crop of grain, while the rest did not average five bushels per acre. On inquiry, it was found that the subsoil, in cutting a ditch, had been spread, merely for convenience over the ground on either side, and thus imparted to it this extraordinary fertility. In another case, by mixing up by means of deep furrows, the marly subsoil with the light and spongy top soil of a piece of low land, an acquaintance succeeded in expelling at once the worthless rush and sedge grasses, and restoring a fine growth of clover. A casual observation in cutting a trench had pointed out this great improvement.

We do not mean to assert that the subsoil always contains, to so great an extent, the elements of fertility. When it approaches barrenness, caution is of course needed in gradually deeping the soil, accompanied with manuring. But this condition is more frequently the exception than the rule. Fifty years of tillage, as farming is too often conducted, rather impoverishes, than adds to mineral manures. The soil was not originally deposited so as to accommodate the surface-stratum of fertility, to the exact depth penetrated by the modern cast-iron plow. The same ingredients essentially, often extend to many feet in depth; and after cultivation has lessened or removed them, it is usually much easier to bring up from below a new supply of the carbonate, sulphate, and phosphate of lime, than to apply them artificially in sufficient abundance, although both may be advantageously resorted to. A very simple experiment will show, throughout a large portion of the country, a difference between the top and under soil. Let a portion of any long-worn soil be dropped into diluted muriatic acid, and no action will be visible; a portion taken a few inches lower, by its effervescence, will usually indicate carbonate of lime in considerable quantity. So much for a single ingredient out of several.

We have just witnessed a most interesting example of the results of deep plowing. A field of land, reputed almost to a proverb for the hard cropping to which it had been subjected for nearly half a century; recently changed hands, and skim-culture immediately gave way to a different mode of treatment. By means of three combined yoke of oxen, attached to that magnificent implement, the Michigan subsoil plow of largest size, the earth was turned up in the most beautiful manner, to an average depth of one foot, actual measurement, and the light of the sun was let in where it never shone before. It was interesting to observe the surface of fresh earth which afterwards covered the field. Mixed with the marly subsoil, were large portions of decayed leaves, black mould, and crumbled roots, which had slumbered there in security for half an age, while the scratching system had been so long in existence but a few inches above; and the whole presented very much the appearance of the fresh or virgin soil of newly cleared land.

It is not however, deep plowing alone that brings hidden treasure into use. There are many, many instances where the sharp-sighted and active farmer will avail himself of much that is highly valuable, but usually unobserved. An interesting example of this is furnished by the practice of a distinguished scientific and successful farmer of western New-York. A few years since, when he first took possession of his farm, he found almost every where, stores of neglected wealth. The butcher had thrown out on his back lot, vast quantities of bones. These he was glad to give away in order to get rid of them. The neighboring plaster mill soon reduced them to a highly fertilizing powder. Now, in the same neighborhood, waste bones are eagerly sought by all. Again, it was customary to draw out and pile up in huge useless heaps, the refuse ashes of the soap-boilers and potash factories. This same observing farmer obtained permission to remove these heaps to his fields. His neighbors witnessed his success, and as a consequence, he cannot now get leached ashes without paying a good price for them.

Again,—he discovered that much of the fertility of his farm was lost by the presence of a superabundance of water in the soil. He adopted a thorough system of tile-draining, laying his drains scientifically with an engineer's levelling instrument. He can now plow his ground sooner in spring, and secure earlier sowing; the plow runs more easily through the fine crumbling earth than in the wet adhesive mass as formerly; the roots penetrate deeper, drouth does not affect the porons bed of earth, the cold water of the subsoil does not chill the early plant; in short growth commences sooner, and advances without interruption until it reaches full and perfect maturity. The result of this successful practice is, that an imported tile-machine of the best construction, has been scarcely able to supply the general demand. Who can estimate the benefit thus resulting from the enlightened example of a single individual.

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Agriculture---A Science.

Progress is the almost universal law of the present age. We hear about a higher law than the commonly received one in government,—of a more perfect organization of society,—of a more refined literature—of improved facilities for commerce, travel, and the interchange of thought,—of startling discoveries in science and the mechanic arts—of surprising inventions of machinery, and so on to an unlimited extent. Yet whenever a new principle has been broached, the timid have refused to recognise it because it was *new*, and empirics have seized eagerly upon it, and by false induction, drawn absurd conclusions; while those who would promote sound knowledge, have been obliged to contend with both these classes, as well as to enforce and illustrate the nature and bearing of the idea they aim to bring into notice and to make useful.

So is it now, when the importance of elevating Agriculture to the rank of a science, and making its practice a rational employment and a means of culture, is openly advocated. All seem well content that there should be improvement in other pursuits; but when the hand of the reformer is laid on the farms which private industry has tilled, some rise up in defence of the old paths, as if their household gods had been insulted and dishonored. Without spending a thought on a class of persons who ridicule the very idea of improvement in Agriculture, we propose to answer an honest objection, and to endeavor to remove a prejudice against the introduction of scientific principles into practical Agriculture.

"The art of making science inaccessible," which has so long been taught in the schools, must, in this progressive and thinking age, give way to a system of a more popular and practical nature, retaining all that is truly valuable in the *old*, so modified and brought down to common apprehension, as to be serviceable to those who most need its benefit.

All knowledge is derived from first principles, and these, in natural science, become evident only after a series of careful experiments, and long continued observation. It is the ultimate object of physical science to discover these laws, and by inductive reasoning to generalise them and draw from them logical conclusions. All that exceeds this, goes beyond the proper province of physical science, and belongs to the sphere of speculation. No mind is sufficiently comprehensive and powerful to grasp this universe as a whole, and by an analysis of all its parts, to exhibit its perfect harmony, the mutual relation of each integral part, and all the laws of nature. The phenomena of nature, are alone given to us, and it is by observing the connection between these and certain results, that first principles are established, and advance made. In works on the various branches of science, we find only the record of the observations of others and the conclusions they have drawn from them, upon the truth or falsity of which future observation must again decide. It would be erroneous, however, to infer that there can be nothing fixed and determinate in physical science; for there is a wonderful simplicity and completeness in the laws of nature, apparent to every mind. Phenomena, resulting from the law of gravitation, and those of astronomy, were once the objects of mystic speculation, and gave rise to a thousand dogmas which we have received as the melancholy inheritance of the past. Mind has ever been obliged to wade through error in its search for truth; but once discovered, like the diamond in the mine, it shines by its own native light, bringing irresistible conviction of its worth.

Natural science is, then, emphatically a progressive one, always giving scope to the perceptive and logical powers,—always exciting curiosity, and repaying investigation with the most certain and satisfying knowledge. The infallibility which attaches to every truth brought to light by actual and repeated experiment, makes definite and undeniable every step of progress, and furnishes unmistakable data for farther research. This brings within the grasp of every inquiring mind, all the means necessary to the perfect comprehension and successful application of the results of investigation. Every person who has an eye to observe, a hand to work, and a head to think, may, if he choose, be a student of nature,—an experimenter in the great laboratory of the world, and a demonstrator of practical science. Nature is a text-book, alike open to all, and he whose area of observation is confined to the limits of his own garden, may discover facts as important as one who traverses the earth in search of the strange and inexplicable. There cannot be a stronger incentive to action, than the fact that so much which is beautiful and instructive lies half concealed and half revealed in the bosom of the earth—that the means of filling both the purse and the brain are within the reach of all.

It is, in this country, comparatively a short time since Agriculture has been ranked among the branches of natural science, and it has not the completeness which belongs to those of longer standing, and upon which more elaborate attention has been bestowed. Nor can a perfect system of Agriculture be expected. There is such a variety in soils, so much that is variable and conditional in climate and seasons, that it is difficult to determine whether apparent results are referable to peculiar circumstances or invariable laws. So long as the earth continues her revolutions, will there be changes in the practice of cultivation, and the capacity of the soil will never be so fully known that no undeveloped power will be latent in it; yet, that there are certain FIXED PRINCIPLES in Agriculture, alike operative under all circumstances, and in all climates, no well informed mind can doubt. Now so far as accurate observation has established these *principles*, so far is Agriculture a SCIENCE—i.e., so much is known, on which all may safely rely, a fact to which they may refer for authority; and so fast as farther experiment reveals other determinate laws, just so fast will the science progress.

The community has long felt the need of some means of ascertaining definitely what is *principle*, and what mere conjecture and hypothesis, in all that is written on improved systems of Agriculture. If profound and practical knowledge is ever to take the place of empiricism, it must be by fundamental instruction in the first rudiments of science,—as we have defined the term,—and who can impart this instruction, if not those who rank among our scientific men, and add to minute and long observation, high talent and ripe culture? It is to such men, we must look for authority, and by them be guided in investigation; and it will be no little advance in agriculture, to be well assured that the true foundation is laid, on which every intelligent farmer must build for himself.

It is with a view to teach the application of science to practical agriculture, to form a nucleus for inquiring farmers, that the Trustees of the University of Albany have organized a department exclusively for this purpose.

Prof. JOHN P. NORTON will deliver a course of lectures, commencing the second Tuesday of January, comprising "a complete outline of the best system of modern Agriculture," embracing the general structure and growth of plants,—the composition of soils, and how affected by different manures,—the elements of barn-yard, mineral and artificial manures,—an analysis of the products of the soil, showing their properties and value,—the composition of milk, butter, and cheese, and the best method of feeding and fattening animals. That these lectures will be eminently practical, reliable and instructive, the well-earned reputation of Prof. NORTON, is a sufficient guarantee.

Prof. JAMES HALL, of the N. Y. Geological Survey, will deliver a course of lectures, on the bearing of Geology on Agriculture, conveying a fund of information that no one should be without.

Dr. HENRY GOADBY announces a partial course on Entomology, taking up the importance of a knowledge of insects to the agriculturist, the injuries caused by them to crops and fruits, &c. Prof. Goadby has recently closed a course of lectures in this city, and no one who listened to them, can doubt the accuracy of his knowledge, or fail to be pleased with his elegant style.

These lectures are not designed for the advanced scholar or the young student merely, but for the working farmer, and all who wish to inform themselves on these subjects. They are especially adapted to young men, who are engaged in active agricultural pursuits. The clergyman, teacher, lawyer and physician are required to pursue a course of study to fit themselves for the practice of their profession, and why should the profession of Agriculture be entered upon, with no preparation, and with no higher purpose than "to get a living?" A marked distinction is every where made, between a thoroughly read practioner and a quack, and this distinction is now very properly carried into farming. When three months attendance on instruction will give one an insight into the principles of Scientific Agriculture, and furnish data for life-long research, we cannot believe that an ambitious, right-minded young man, will "settle down" to plod in the old beaten track. The narrowest policy would dictate a course the most profitable, in which the greatest income might be secured with the least outlay, and when, to a system of profit and loss are added the laudable ambition of promoting sound, practical knowledge and self-culture, it becomes a privilege and a duty to use all possible means for improvement—to lead a rational and not mechanical life.

We trust that a scheme so admirably adapted to the wants of the public, will not fail for lack of ready support, and that the time is not far distant when our farmers will be as desirous to send their most promising sons to an agricultural school, as they now are to our law and medical schools. [See advertisement.]

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Cranberries on Upland.

The question whether cranberries can be grown advantageously on upland, is not, probably, fully settled. A correspondent of the *New-England Farmer*, referring to several articles, says—"the feasibility of growing this fruit on upland, is beyond a doubt; but of the expediency of it, as a matter of profitable culture, I am not fully advised." The *Prairie Farmer* states that it has been tried in that vicinity, and says—"we tried the vines very faithfully, as did others in this region, all with the same, or similar success. Our vines *did grow* for a while, but gradually got tired of it, and gave out by degrees; they never gave us any fruit. They were plainly not at home."

The most encouraging information we have seen in regard to success of cranberries on upland, is in a communication of PAUL HATHAWAY, North-Middleborough, Mass., in the *Ploughman* of Dec. 6th, last. He states that he has an acre of cranberry vines on upland, set out in 1845 and 1846—that they have borne fruit every since they were set out. But he gives no definite statement in regard to quantity of fruit produced. He says he has had a "good supply" for himself and others, and this year "sold a few at two dollars a bushel." He left the vines, after they were set out, to "take their own way," and they have obtained full possession of the ground—some of them having run seven feet. We have no particular description of the soil, and know not whether it is moist or dry. Some writers say they should be manured with bog muck, or peat, every year or two. Let us have more results.

Random Notes on Pears.*

A few observations made during a short visit to some of the eastern gardens, may prove interesting to the fruit-growing readers of this journal.

Blight.—A remarkable fact, and throwing some light (negatively,) on the pear blight, is the entire absence from this disease among the trees in the neighborhood of Boston. It seemed indeed strange to hear such men as the president and ex-president of the world-renowned Horticultural Society there, inquiring for the appearance and symptoms of the blight as of a disaster personally unknown to them, but so universally known and dreaded in Western New-York and in Ohio. Boston and Rochester are not dissimilar in temperature of climate, hence we cannot trace it satisfactorily or wholly to the weather. Nor is rapid growth a necessary cause, for more freely growing trees than the thousands on the grounds of M. P. Wilder, S. Walker, or C. M. Hovey, are nowhere to be found. A part of Col. Wilder's grounds consist of reclaimed bog, with an ample addition of improving and fertilizing materials; and the finest pear grounds belonging to President Walker he stated had been very heavily dressed with yard manure, with additions of ashes and guano, and the whole repeatedly plowed, and repeatedly subsoiled, till mellow and rich in a high degree to a depth of about two feet. The growth of the trees fully corroborated his account. Limited observations at Philadelphia indicated a somewhat similar condition of the trees at that place.

Pyramidal Pears.—The finest collection, perhaps, in this country, are the 1500 pyramids of Hovey & Co., at Cambridge, some of them 10 feet high. The pear crop proving this year mostly a failure, but few of them were loaded with fruit; but the beauty of their training, as presented in the long avenues of these trees, could scarcely be surpassed by Cappe's celebrated trees of Paris. These were mostly, like Cappe's, on pear roots. Equally handsome specimens were observed on some parts of Col. Wilder's grounds.

New Pears.—Of the newer varieties which have been considerably proved, none appear to be more generally admired than the *Doyenne Boussock*, for size, growth, productiveness, and quality. We have never heard a word against its high character. The *Beurre Langelier* is regarded by Hovey as the best early winter pear, and is highly esteemed by Manning, Walker, and others; while on the other hand, Manning thinks the Lawrence is decidedly the best, so far as a partial trial will indicate. Col. Wilder finds the *Doyenne gris d'Hiver Nouveau* of good quality, and ripening later than Easter Beurre; the *Howell* large and fine; the *Triomphe de Jodigne*, "good;" *Nouveau Poiteau*, handsome and fine; and *Soldat Laboreur* a beautiful grower, and a fine pear. *Van Mons' Leon le Clerc*, as elsewhere, cracks badly with him, and the *Dix* very badly. Some of the worst looking specimens of cracked pears observed anywhere, were on a tree of the Dix. Has this new and hardy American tree, already reached old age? Or will it die of old age at Dorchester, at the same time it is flourishing in youth and vigor near Rochester? A puzzling fact in relation to cracking, occurred on the grounds of the writer,—a young Doyenne pear on *new ground*, while bearing its first crop, became dotted with black specks precisely like those of leaf blight, on both leaves and fruit at the same time, and the fruit cracked and was worthless. This was some years ago, and has not been repeated. Not far distant, on very similar soil, stood another old Doyenne tree, bearing yearly six to twelve bushels of uniformly fair fruit. This fact is very adverse to the theory of *exhaustion of soil* by trees of long standing.

Robert Manning has found only two of Knight's pears of much value, the *Eyewood* and *Moccas*. The *Monarch*, after a vast amount of pains to get it correct, proves after all, of no great value. *Manning's Elizabeth*, he regards as one of the finest early pears. The *Duchesse d' Orleans* promises to become very valuable. Of Gov. Edwards' new sorts, the *Calhoun* proves the best, and the *Dallas* a good fruit; the others not so worthy of notice.

Standards on Quince.—Those sorts which grow freely and endure well on the Quince, as Louise Bonne of Jersey, Angouleme, Glout Morceau, &c., may be set out in orchards and trained standard height. Specimens thus treated, more than twenty years old, bearing usually several bushels a year, were observed in a fine condition in the gardens of S. Walker and M. P. Wilder. The Langelier and Boussock promise to be good for this purpose.

Double-Worked Trees.—S. Walker strongly doubts the propriety of double-working many of the refractory sorts. He has trees of the Aremberg, Van Mons' Leon le Clere, and Dix, all double worked, but they succeed but poorly. Their growth is usually slow, and it is some years before they bear much; and the first good crop exhausts nature and the tree commonly perishes after a full effort at bearing. Dearborn's Seedling, when double worked, does well, and it is nearly the only sort that does so. Results may sometimes prove more favorable on other soils and in other places; but these show the necessity of caution in the promiscuous planting of such trees.

Influence of Locality.—The difference thus created is often remarkable. Dr. Brinckle of Philadelphia showed specimens of the Seckel pear, which would be looked upon by cultivators further north, as of great size; one specimen, which he assured us was by no means the largest he had seen, measured only two lines less than three inches long; and a fine crop of Doyennes in Baxter's garden, furnished plenty of specimens three inches in breadth and in height. The Pennsylvania and Chapman pears are greatly superior to the same sorts grown further north; and the Lodge, so poor with us, becomes really a fine pear at Philadelphia.

A Productive Tree.—A tree of the *Winkfield pear*, not of very large size, at S. Walker's, bore one year 15 bushels of fruit. The second rate ones (that is, after all the best had been selected,) sold for $6.00 per barrel. What would an acre of such trees yield per annum, admitting the value of the crop at half the preceding price, or $3 per barrel?

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* This article was written for the Nov. No. of the Cultivator, but has been accidentally deferred to the present.

Honey Bees---The Apiary.

The old system of keeping honey bees has always appeared to me to be very defective. It is but one small remove from the state of nature—just so much of an improvement as to induce the bees to accept of it and serve in it in preference to their old hollow trees, and no more. Numerous experiments have proved that bees can be managed upon systematic and economical principles, just as well as cows, and other domestic animals can, and that the per centage of profit on the outlay and labor is far greater. An examination of the plan of an apiary, invented by Mr. Gilmore, of the state of Maine, has afforded me much pleasure, and led to a desire to call public attention to the improvement of this valuable department of rural economy. Before proceeding, however, to speak of the apiary, I will say a few words as to the habits of the honey bee. Many, nearly everybody, supposes that the bee collects honey from the nectar of the flowers, and simply carries it to its cell in the hive. This is not correct. The nectar he collects from the flower, is a portion of its food or drink; the honey it deposits in its cell is a secretion from its mellific, or honey secreting glands, (analogous to the milk secreting glands of the cow and other animals.) If they were the mere collectors and transporters of honey from the flowers to the honey-comb, then we should have the comb frequently filled with molasses, and whenever the bees have fed at a molasses hogshead! The honey-bag in the bee performs the same functions as the cow's bag or udder, merely receives the honey from the secreting glands, and retains it till a proper opportunity presents for its being deposited in its appropriate store-house, the honey-comb. Another error is, that the bee collects pollen from the flowers accidentally, while it is in search of honey. Quite the contrary is the fact. The bee, when in search of nectar, or honey, as it is improperly called, does not collect pollen. It goes in search of pollen specially, and also specially for nectar. When the pollen of the flower is ripe, and fit for the uses of the bee, there is no nectar; when there is nectar, there is no pollen fit for use in the flower. It is generally supposed, also, that the bee collects the wax from which it constructs its comb, from some vegetable substance. This is also an error. The wax is a *secretion* from its body, as the honey is; and it makes its appearance in small scales or flakes, under the rings of the belly, and is taken thence by other bees, rendered plastic by mixture with the saliva of the bees' mouth, and laid on the walls of the cell with the tongue, very much in the way a plasterer uses his trowel.

Now, by a proper understanding of these facts, the reader will be able to judge of the propriety of the improvements in the apiary. They must understand that the bee will make honey, no matter what food it may feed upon, if the food be such as is appropriate for the bee, and it will not eat it if otherwise. The flavor of the honey is derived from the aroma of the flowers or other food, but the article will be honey, and not molasses or sugar, whether the bees feed on flowers, or molasses, or sugar.

The apiary, therefore, should be constructed in such a way, and should be managed on such principles as to afford the bees the best accommodation, and fullest supply of food, at the least expense of time and labor to the bees, and the least cost to the proprietor. Gilmore's plan seems to the writer to afford all these advantages to a greater extent than any other. He constructs a bee-house of the size that will accommodate as many hives as he intends to keep. The house is made tight, with a window to afford light to the attendant. Inside frames are arranged to receive the hives. The hives are made in three divisions, one above onother, so that when the upper division is full of honey, it can be removed, and another put under the lower one. The tops of the several divisions are so arranged that the bees can pass through them to the division above. When the bees have multiplied sufficiently to require more room, a fresh hive is set by the sides of the old one, and the bees that on the old plan would have "swarmed," and probably have been lost, go to work in the new apartment, with a queen at their head.

This secures all the advantages of the old single hive system, with a queen to each family, and the community system, which prevents swarming, and the loss of bees. It is a curious fact, that although the bees of all the hive live and work in one common large community, yet the queens all remain in their several separate apartments, never leaving them like troublesome neighbors. The whole community form a large republic composed of numerous separate states, in a perfect confederacy.

But the greatest improvement of Gilmore is his plan of *feeding* the bees. He has prepared a kind of liquid food, which is placed in a feeding trough, under or near the hives, in the house, at which the bees feed, instead of going out in search of flowers; so that they only have to go out when they require "*bread*," in search of pollen. This saves much time, and enables the bees to produce much more honey than they do on the old plan. The going out after pollen, is just enough to afford them necessary exercise and fresh air, and in wet weather they have their regular supply of food, and are not obliged to fall back upon their stored honey. Though Gilmore has made no claim to the discovery, it is certain that the artificial food may be *flavored with vanilla or lemon*, or any other aromatic, so that the honey will partake of it, and honey of any flavor may be produced. The injurious qualities of wild and West India honey—that prevent so many people from eating it—may also, by this artificial feeding, be mainly, if not entirely avoided, as it is pretty well known that these qualities are derived from the wild plants which the bees feed upon, just as the flesh of pheasants and wild animals, are often rendered poisonous by the wild berries and foliage they feed upon; and as cow's milk is rendered garlicky and bitter, by what she feeds upon. The advantages of Gilmore's plan, therefore, are very great, and it is believed that there is no appendage to the farm that would pay so well, for so small a capital, as a snug apiary, constructed on those principles.

The annoyance of the bee moth, for a remedy for which so much trouble has been taken, and so many inventions made, it is believed is more effectually provided against by this plan, than by any other. In the first place, the external house acts to a great extent, as a shield, the hives being all inside, and some distance from the walls; in the second place, all the bees of all the hives are in immense numbers inside the houses, in vigorous and robust health, ready to attack and destroy any moth that may venture to approach their domicil. For, although there may be in the house fifty different hives, each with its queen, the bees of the whole mingle socially together, and are ready at all times to make war upon the enemy.

This plan also enables the proprietor to have his honey " put up and packed ready for market," in large or small packages or boxes, by the bees themselves. This is a most beautiful feature of the plan. The purchaser can get a box containing two pounds or twenty pounds, of virgin honey, that human hands have never touched, pure as " twilight dews."

But I have said enough, probably you will think too much, upon so small a subject. But when we consider that the production of honey may be made as important a subject of rural industry, as the dairy itself, I think you will agree with me, that much more might be said in reference to it. *

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The Drill Culture of Wheat, &c.

Eds. Cultivator—No branch of improved husbandry has attracted greater attention among the wheat growing farmers, during the past six years, than the drilling of wheat and other small grains, by the use of appropriate machinery for the purpose. The drilling machines in use in this country, like the plows, have peculiar distinctive features, differing in many important particulars from those of Great Britain, or any other portion of the globe. There are already ten or twelve different patents, embracing each some particular quality of merit which entitle it to favor among their respective friends and advocates; but upon a practical examination of their working powers, a few will be found to possess such extraordinary advantages over the others in use, that even a person unacquainted with them would find no difficulty in determining which would, under all circumstances, be the most efficient and profitable. It is not our purpose at this time to decide in favor of this or that drill, but shall rather show a few reasons why the system of drill culture can in many cases be profitably adopted, and also, the effects it would produce upon growing crops of grain, when performed by an experienced and skillful workman.

We have been much amused in reading the flaming accounts widely circulated by interested parties in the sales of those drills, in favor of drill husbandry, and in many cases the most extravagant calculations have been made, having a tendency to deceive those who may blindly purchase the machines. It certainly cannot be questioned at this day, but that drilling in wheat possesses many valuable claims over the broadcast system of sowing grains; and what those claims are, and the circumstances under which the system could be advantageously practiced, will be presently satisfactorily explained.

A small saving of seed; regularity and precision in covering the seed to a good and suitable depth; an increase of product; a superiority in the quality of grain; less liability to the crop in lodging, and a protection to the crop against winter-killing and rust, are among the many reasons that may be adduced in favor of drill culture. The saving of seed is not much of an item, although many of the venders of machines set forth that a saving of from two to three pecks per acre is effected over broadcast sowing. In most cases too little seed is sown in this country, and even when seeded with a drill not less than six pecks of wheat should be sown per acre.

This practice is opposed to the theory set forth by many of the most enlightened farmers in England who have reduced their average seeding from three bushels per acre down to three pecks! and that too with an increased production, ranging from five to ten bushels per acre. In England, those who employ the drill for the sowing of wheat and barley, either horse or hand hoe, their crops in the early spring months, which practice has in no instance been carried out on a large scale on this continent. The stirring of the soil between the rows of growing crops of grain, produces stimulating effects on the plants equal to what are obtained on corn, potatoes, turneps, and on other crops, that are ordinarily hand or horse hoed; and therefore their sowing cannot be profitably practiced, unless the hoeing system be adopted, which cannot be done on a large scale, in a country like this where agricultural labor is enormously high, when compared with the low price of produce. A less quantity than six pecks of seed per acre, will lessen the average yield of wheat rather than increase it, although the drilling machine may be employed in seeding the ground. This is obviously the case in all locations where the winters are severe, and the plants are apt to be destroyed by frost, or seriously retarded in their growth by the freezings and thawings that occur during winter and early spring months. The ordinary distance that drilling machines deposit the seed in parallel rows, ranges from eight to ten inches asunder, and on most soils ten inches is preferable to eight, from the fact that the greater the distance between the rows, the better opportunity will the rays of the sun have to directly strike on the growing plants, thus maturing and hardening the outer surface of the straw, which in connection with wind and other atmospheric influences, will in a great measure prevent rust, mildew, blight and other diseases indicated by premature growth and maturity. If the seed be liberally and uniformly distributed to the depth of from three to four inches, in rows of not less than seven nor more than twelve inches asunder, it must be obvious that the plants will form a mutual protection to each other throughout the whole line of rows, and the roots will become so completely interwoven in each other that the one cannot become dislodged by frost, without removing with it a solid phalanx of neighboring plants. This by good management on the part of the farmer need not happen, from the fact that if the surface of the ground be kept free from a superabundance of water, the frost under such influences will rarely have a prejudicial effect upon the crop. In ordinary cases the sowing of wheat commences about the first of September and closes with that month. By early sowing and liberal seeding the plants obtain a rank growth before the setting in of winter, and the tops of those plants form a sort of umbrella covering to the roots, which to some extent protect them from the severity of late autumn and early spring chilling winds, which advantage cannot be reaped when the broadcast system is adopted. From this influence alone under favorable circumstances, the crop will attain a much earlier and more perfect development, and a perceptible difference in favor of drilling may be seen in the crops during the whole of the season, so much so that the most skeptical would readily accord to the system a decided preference over the broadcast sowing.

If the machine employed be efficient, and the ground be brought to a proper state of cultivation, the seed may be distributed with the greatest degree of precision, and the field throughout will present a perfect uniformity exacting from all portions of it a relative product in proportion to its powers of production, which could not be so perfectly done, if even the most experienced seedsman be employed, by the common process.

By using the drill, the seed may not only be sown much more evenly, and buried under the surface at a given uniform distance, but unlike the common plan, the work may go on successfully somewhat regardless of the peculiar state of the atmosphere, and high winds especially prove no barrier to the progress of the work. As the best season for sowing wheat is confined to the single month of September, throughout the entire wheat belt of the union, any process, that would at all times secure the early and perfect completion of the work, is deserving of consideration and favor. This in the hands of a good managing farmer may be greatly facilitated by the use of an efficient drilling machine, and any person who becomes once acquainted with their properties and use, would not return to the old and somewhat slovenly method, although they obtained no additional yield from the use of the implement.

An increased product may in a majority of cases be realised, but the greatest disappointments will occasionally occur, which to the uninitiated might create prejudices against the improvement, from the fact that the cause of the failure could not be practically comprehended. It will frequently happen that an increased production of from eight to ten bushels of wheat may be realised per acre from the employment of the drill, but in other cases decided damage rather than a benefit will accrue from the practice. It is of the greatest importance to the farmer that he should know all about the influence that this, or that, practice has upon his growing crops; and it ought to be the business of the agricultural philosophers of the day, to point out the shoals and quicksands upon which so many flounder, in their vain attempts to carry out systems of farm practice and management, of which they are practically totally unacquainted. No one should attempt to use the drill unless the ground be previously brought into a fine state of tilth and cultivation. The work cannot be creditably or perfectly done when the ground is rough, or the surface is uneven, and when an attempt is made to plow the land in ridges, either narrow or wide, regard should be had to regulating the width of those ridges, so as to work the drill lengthwise of them, securing, if possible, straightness and uniformity, so that the furrows made by the drill shall correspond exactly with the open furrows of the ridges. On a fine porous wheat soil, such as is underlaid either by a strata of gravel or drift sand and shales, some five feet from the surface, there will be found no advantage whatever from forming the land in narrow or even wide ridges, as no surface water can long remain in contact with the roots of the wheat plants. In the management of all soils of this kind, the indented appearance given the surface by the coulters of the drill, is a decided advantage, as the rows of plants are considerably below the common surface of the ground, and they are thus sheltered from the raking winds of winter, and in process of time the soil crumbles down around the roots, thus imparting strength and vigor to the plants at a period when their growth is passing through its most delicate stage. Whilst this is true on all soils on which the surface water passes off freely, the reverse is the case, on heavy clays, or on soils which are underlaid near the surface with a close retentive sub-stratum calculated to hold water like a basin. The furrows or indented lines formed by the drill, act as so many reservoirs to retain the falling rains, and when the ground freezes up in winter, by a minute examination, it will be found that immediately around the roots of the plants it is completely saturated with water, and in many cases pools of ice are formed by this influence in places where the water would have passed from the surface had the common practice of sowing been adopted. The losses obtained from this cause have in many cases staggered the faith of many of the strongest advocates of the system, and not a few can be found who are disposed to condemn rather than favor drill husbandry, simply because they did not understand the influence that an imperfect application of the practice would have upon the growing crops. In all cases where the drill is used upon a stiff clay soil, or where the water would be likely to remain on or near the surface, a light pair of seed harrows should be passed singly lengthwise of the drills, which will smother the surface without displacing the seed from the bottom of the drills, and thoroughly remove the cause producing the prejudicial effects pointed out.

When the drill is used by a farmer, who, understands its practical working powers, and who takes proper pains in preparing his ground for its use, he may not only reasonably hope for a greatly increased product, but he may safely expect that the sample of the grain will be superior to his neighbor's. The straw is invariably much harder than when the seed is sown broadcast, and consequently the rust is not so liable to attack it; and besides the crop is not so likely to lodge, as would be the case were the common system of sowing practiced. The advantages resulting from the adoption of the drill system of husbandry, might be greatly extended, but sufficient has been adduced to convince those whose attention may be turned to the subject, that in careful hands at least, no modern improvement will pay a better interest upon the investment, than drill culture.

This, however, like most other branches of improvement, requires great care in its management. It ought not to be attempted by a slovenly farmer—and unless the ground be previously fitted for the process, it would be unwise to attempt using the machine, although it might be in the hands of the farmer, and be paid for at an extravagant rate. Only now and then a field is sufficiently cultivated to warrant the employment of a drilling machine; and this fact is pressed upon the attention of the readers of the Cultivator at this time, to prevent them from taking steps which for want of better experience, they might have reason to regret. The use of the drill is strongly to be commended, but no slovenly farmer need expect to derive any advantage from it. W. G. Edmundson. *Keokuk, Iowa*, 1851.

State Agricultural Societies.

Editors of the Cultivator—The enterprising farmers in Vermont are friendly to a State Society for the advancement of Agriculture; many of them read The Cultivator, and they would, doubtless, like to know the doings and present position of their State Association. It may also, perhaps, be agreeable to individuals in other communities, about engaging in a similar enterprise, to have our state organization in a convenient form for reference. With your permission, then, I will give a brief history of the Vermont State Agricultural Society.

Several months ago, The Cultivator and other papers, announced that a respectable number of the farmers of Vermont, met at Middlebury, and resolved to try the experiment of a State Fair, fixing upon the 10th and 11th days of September, at Middlebury, as the time and place for holding the same. At the time and place designated, an Exposition was accordingly made; the people of the state were there in great numbers, and this first effort of the kind ever made in Vermont, proved quite successful, exceeding, in results, the expectations of its most sanguine friends. On the second day of the Fair, a State Society was organised, by the adoption of a Constitution, and by a choice of the necessary officers, a list of whom may be found in The Cultivator for November, 1851.

The Constitution is a pretty close copy of that of the New-York State Society, but for immediate and convenient reference, I here give it.

Constitution of the Vermont State Agricultural Society.

Sec. 1. This society shall be called the Vermont State Agricultural Society, and its object is improvement in Agriculture, Horticulture, and the Arts.

Sec. 2. The Society shall consist of such citizens of the State as shall signify, in writing, their wish to become members, and shall pay, on subscribing, not less than one dollar; and also of honarary and corresponding members.

The Presidents of County Agricultural Societies, or a delegate from each, shall *ex-officio* be members of this Society.

The payment of twenty-five dollars or more, shall constitute a member for life, and shall exempt the donor from annual contribution.

SEC. 3. The officers of this Society shall consist of a President, four Vice-Presidents, one to be located in each judicial circuit, a Recording Secretary, a Corresponding Secretary, a Treasurer, and Directors, to consist of the officers above named, and five additional members, and five of the ex-Presidents whose term of office has last expired, shall be *ex-officio* Directors; and also a General Committee,—members of which shall be located in the several counties, and be equal to the representations in the State Senate.

SEC. 4. The Recording and Corresponding Secretaries shall perform the duties usual to such officers.

The Treasurer shall keep the funds, and shall disburse them on order of the President, or a Vice-President, countersigned by the Recording Secretary, and shall make a report of the receipts and expenditures at every annual meeting.

The Directors shall take charge of and distribute or preserve all seeds, plants, books, models, &c., which may be transmitted to the Society; shall have charge of all publications; shall appoint the General Committee; shall have power to fill any vacancies which may occur in the officers during the year, and shall have the general control of all matters pertaining to the interest of the Society, not specially acted upon by the Society at large.

The General Committee are charged with the interests of the Society in the counties in which they shall respectively reside, and will constitute a medium of communication between the Directors and the other members of the Society.

SEC. 5. There shall be an annual meeting of the Society at such time and place as the Directors shall designate, at which all the officers—save the General Committee—shall be elected by a plurality of votes, and by ballot. Extra meetings may be convened by the Directors, and at such meetings twenty-five members shall be a quorum.

SEC. 6. The Society shall hold an Annual Cattle Show and Fair, at such time and place as shall be designated by the Directors.

SEC. 7 This Constitution may be amended by a vote of two-thirds of the members attending any Annual Meeting.

A meeting of the Directors was held at Burlington, on the 25th day of September last, when the General Committee were chosen, and also a committee to draft a Bill for the consideration of the Legislature, granting the Society an incorporation and an annual appropriation of money from the State Treasury. In October the following Bill was introduced to the House of Representatives, referred to the Committee on Agriculture, and by them returned to the House, with a report in favor of its passage:

An Act creating a State Society for the Promotion of Agriculture, Horticulture, and the Arts.

Whereas, certain citizens met at Middlebury, in this State, on the 10th and 11th days of September, A. D. 1851, formed an Association, chose a President, four Vice-Presidents, a Rec. Secretary, a Cor. Secretary. Treasurer, and a Board of Directors, named their Association "The Vermont State Agricultural Society," and announced its object to be "improvement in Agriculture, Horticulture, and the Arts:"—

Now, therefore, It is hereby enacted by the General Assembly of the State of Vermont:—

SEC. 1. Said citizens so associated together, with such citizens of this State as shall hereafter signify, in writing, their wish to become members of said Society, and pay, on subscribing, such sum of money as the Constitution or Rules and Regulations thereof, may prescribe, are hereby constituted a body politic and corporate, to be known and distinguished by the name of *The Vermont State Agricultural Society*, whose object shall be improvement in Agriculture, Horticulture, and the Arts. Said Society may make and establish such By-laws, Rules and Regulations, not inconsistent with the Constitution or laws of this State, or of the United States, as shall from time to time appear needful for its proper government,—and the By-laws or Rules and Regulations adopted by said citizens, at their meeting in Middlebury, aforesaid, shall be the By-laws, Rules and Regulations of said Society, until others are adopted by the members thereof; may have a common seal, and the same alter at pleasure; may sue and be sued, plead and be impleaded, contract and be contracted with, and prosecute and defend to final judgment and execution, in any court of law or equity; may hold by gift, purchase, or otherwise, real and personal estate to an amount not exceeding ten thousand dollars, for the promotion of the object of said Society, which estate shall be exclusively devoted to such object.

SEC. 2. The officers of the Association mentioned in the Preamble to this Act, shall be the officers of the Vermont State Agricultural Society, and shall hold their places for one year, or until others shall be chosen at a regular annual meeting of the Society called for that purpose, agreeeble to the Rules and Regulations thereof. Thereafter, the officers of said Society shall consist of a President, four Vice-Presidents, a Recording Secretary, a Corresponding Secretary, a Treasurer, and such number of Directors as may be determined by a vote of the Society. Said officers shall be chosen annually, at such time and place, and in such manner, as the Society by its By-laws or Regulations shall designate; shall hold their places until their successors are elected, and have power to fill all vacancies that may occur among them during the year.

SEC. 3. It shall be the duty of the Recording Secretary of said Society, to keep full and fair records of all proceedings of the same in a book provided for that purpose, and such book may be used as evidence in any Court in this State.

SEC. 4. Whenever the Vermont State Agricultural Society shall raise any sum of money not less than $1000, and place the same in the hands of its Treasurer, to be awarded and paid out in premiums as hereinafter mentioned, the said Treasurer shall make an affidavit of the same, specifying the amount of money so raised and deposited with him, which affidavit shall be filed with the Treasurer of this State, who is thereupon directed to pay to the Treasurer of said Society, out of the Treasury of the State, the sum of $1000, to be awarded and expended in premiums as hereinafter mentioned; and annually thereafter, a like sum of money, for a like purpose, is directed to be paid out of the Treasury of the State, to the Treasurer of said Society: *Provided*, however, that in each year, before said sum of $1000 shall be paid out of the State Treasury, it shall appear, by the affidavit of the Treasurer of said Society, that a sum of money not less than $1000 has been raised by said Society, and is in his hands for the purpose aforesaid.

SEC. 5. At least $2,000 shall be annually awarded and paid out in Premiums by the Vermont State Agricultural Society, in such sums as said Society, by its Rules and Regulations, may, from time to time, direct; and it shall be the spirit and intent of such Rules and Regulations to encourage the people of this State in the breeding and rearing of the best and most profitable agricultural animals,—in the practice of the most correct methods of Agriculture and Horticulture; to stimulate them to enterprise, experiment, discovery and improvement in these primitive and important pursuits; so far as may be, to diffuse light and knowledge upon these subjects; and to promote the success of those arts worthily engaging the application of the people of Vermont.

SEC. 6. The Treasurer of said State Society shall withhold all premiums awarded on field crops, fat animals, orchard or general farm management, Maple sugar, the products of the dairy, and, generally, upon all the methods of Agriculture and Horticulture in regard to which it is desirable to diffuse specific information, until the person or persons to whom the same shall have been awarded shall deliver to said Treasurer, in writing, an accurate description of the process of preparing the soil, including the nature and quantity of the manure applied, and a full detailed statement of the manner of cultivating the land and raising the crop, feeding the animal, or manufacturing the article,—as the case may be,—also, of the expense, increase, and profits of the same: with the view to supply the exact and necessary data from which said Society may collect and disseminate useful information upon these subjects.

SEC. 7. It shall be the duty of the Treasurer of said Society to deduct from the premiums awarded to any person the sum required to be subscribed annually for membership therein; and said sum, so reserved, shall constitute such person a member of the Society for the year then next following.

SEC. 8. The Treasurer of said Society shall, in the month of October annually, furnish six copies of the Annual Reports of the Society to the Secretary of State, to be by him placed in the Library of this State.

SEC. 9. This Act is subject to alteration, amendment, or repeal, by any future Legislature.

SEC. 10. This Act shall take effect from its passage.

I am sorry to be obliged to say that the foregoing bill received little consideration from the Legislature, and was dismissed with the greatest despatch—not being deemed worthy of even a fair argument. It is really humiliating to humanity that almost always when legislative bodies are invited to do something to advance agriculture, they not only refuse, but often treat such application with contempt. There seems to be an inability to understand that whatever improves the agriculture of a State, directly or indirectly favors all other interests. An advancing flourishing agriculture is sure to invite in other trades and callings; and thus the school house, the church, good roads, in short, all the institutions and privileges of good society are readily provided, the necessary burdens of government are easily borne, and the flower of the population, instead of emigrating to other districts, causing the gradual depopulation and decay of towns, is tempted and induced to stay at home. Notwithstanding that an improving cultivation secures these other results, it is difficult to convince legislatures of the propriety of appropriating money for the promotion of good farming, though they will vote it to almost all other objects. Practically, so far as agriculture is concerned, the sentiment seems to be that the world must be rolled backwards; that nothing new, no discoveries or improvements are needed; that we must look to past ages for our rules of cultivation; that all of value, all the farmer can possibly need to know, all that is safe for him to practice, was found out ages ago. What a compliment the holders of such sentiments pay themselves, and their age generally! A sufficient rebuke to such ideas may be found in the memorable words of Lord Bacon, who more than two hundred years ago said: "The opinion which men entertain of antiquity, is a very idle thing, and almost incongruous to the word; for the old age and length of days of the world, should in reality be accounted antiquity, and ought to be attributed to our own times, not to the youth of the world, which it enjoyed among the ancients: for that age, though with respect to us it be ancient and greater, yet, with regard to the world, it was new and less. And as we justly expect a greater knowledge of things, and a riper judgment, from a man of years than from a youth, on account of the greater experience, and the greater variety and number of things seen, heard, and thought of, by the person in years; so might much greater matters be justly expected from the present age, than from former times; as this is the more advanced age of the world, and now enriched and furnished with infinite experiments and observations."

The late Judge Buel, and his associates and colaborers in New-York, early and clearly saw the advantages that would flow to agriculture from associated effort, backed by appropriations of money by government. They were a company of as able, enterprising and useful men as ever graced and honored any State. They were far in advance of public opinion around them, and were at times thought to be quite wild and enthusiastic. After years of earnest solicitations for legislative aid to agriculture, and after exhausting every argument in its favor which their capacious minds could frame, they in part obtained the objects desired. Some of the measures they advocated, are now in full operation; the benefits realised therefrom in their own State can hardly be estimated high enough; the Transactions of the State Society they labored so earnestly to establish, are among the very richest contributions to the agricultural literature of the age, and form a light to enlighten the most distant parts of our country; and society already acknowledges its indebtedness to these men for their far reaching and comprehensive views, and early, earnest, persevering efforts to carry the same. I had lively hopes that Vermonters, seeing the rich results of concerted action and legislative aid to promote agriculture, would at once and quite generally favor measures calculated to produce like results in their own State; but judging from the present aspect, a majority choose rather to consider such measures in the light of an unsolved and uncertain experiment. Although disappointed in this part of our present effort at advancement, I cannot but hope that the spirit of the nineteenth century will get a fast hold upon our algriculture, that the dry bones hanging to it will be shaken, and awakened to life and activity, that the intelligent and active men of the State will be awake and in action, and that we shall somehow contrive to keep along with other communities in the forward movements of the times.

In Vermont, there are various circumstances favorable to the existence and success of a State Society; and around the State, on all sides, there are circumstances which make such a Society quite necessary to its farmers. We live compactly, and feel a community of interests. Railroads span the State in almost every direction. In from three to six hours, they can bring the people together in any one of a dozen of our largest villages; and they will quickly and free of charge, transport all kinds of stock to a place of exhibition. They open new, distant, and desirable markets to our farmers, and invite them to engage in new modes of farming, in the production of a variety of articles heretofore unprofitable for cultivation on a large scale, or of a nature too perishable to reach a suitable market by the old modes of conveyance. We have fine breeds of horses, cattle, and sheep,—indeed, in this regard, we occupy a high vantage-ground; and we must not only preserve their present excellence, but also strive to improve them. This is best done by associated effort, and by comparing ourselves among ourselves; and if we fail of employing these aids, each trusting to himself, in ignorance of what his neighbors are doing, other communities on either side of us, by organised efforts for improvements, will be altogether likely to get ahead of us.

A portion of the farmers of Vermont will certainly endeavor to sustain their State Society by voluntary effort. They will probably prove a sufficiently spirited band of men, to carry it forward successfully. The repulse they have met with in the outset, will quicken them in efforts to do not only their own work in the matter, but also a considerable portion of that which should have been done by the State through its legislature

Now let me suggest an idea or two regarding the advantages which may result to the country at large from the operations of State Societies. If generally organised in the states, they may exert a double influence; for while singly they have their own legitimate, decided, and powerful home influence, collectively, they may furnish the means for exerting a very important national influence. For instance: the State Societies of New-York and Georgia gave very general invitations to the friends of agriculture in other states, to meet with them at their late Festivals, to observe their improvements, and to consult with them and with one another, for the general welfare of agriculture. Now, if these State Associations become general, and these courtesies are extended from one association to another, the farmers of different and even distant sections will be likely to meet together more or less, compare views, counsel upon their mutual interests, become well acquainted with one another, find they do not differ so very much after all, and thus the agricultural community may move forward unitedly and understandingly in efforts to promote their great and common cause, and the prosperity of the country. If Congress should persist in a refusal to establish a Bureau of Agriculture at Washington, the farmers through their several State Societies, may in time form a Central National Organization, to do in part those things contemplated to be done by a National Bureau. In the course of a correspondence with Hon. J. Delafield, President of the New-York State Society, this subject has been briefly discussed. I trust he will pardon the liberty I take in now using an extract from one of his letters to me,—though of the character of familiar private correspondence. He says: "You allude, among other things, to a Central Agricultural Bureau. Upon this point I think we may move to advantage as State Societies or Associations; and with a hope to confer upon this and other matters of moment, I invited the Presidents of all other State Societies to attend our late Fair, and from each I received replies corresponding with the brief views then given. * * * It seems to me improbable that the General Government will take any decided steps in regard to a Bureau. The State Societies may form an association, hold its office at Washington, and being a representative body from the people, carry at an early day a clear conviction to Congress that such a Bureau as has been indicated, is imperatively needed in our Agricultural Republic."

While upon the subject of Agricultural Societies, allow me to throw in a word or two of caution. At all great or small festivals of these Societies, allusions of a distinctly political cast should be strictly avoided. Men of all political parties may meet to consider the interests of agriculture, and find ground spacious enough to stand upon, and weighty matters enough to consult about, all in harmony and good fellowship. These Festival occasions belong to agriculture, not to politics. Political occasions are numerous enough, in all conscience; and these men may kindle up such enthusiasm as the good of the country may seem to demand; but the quiet and harmony of agricultural gatherings should not be disturbed by matters so exciting as those of politics. F. Holbrook.
Brattleboro, Dec. 2, 1851.

Apples, &c., in New-England.

Agreeably to your polite invitation sometime ago extended to me, I sit down to write a few lines for the pomological department of The Cultivator.

Not to waste time or space with any unprofitable preliminary remarks, I will say a few words respecting,

1. The Forms of Trees.—No writer that I am aware of has yet given a good classification of trees in this respect. Barry, in his "Fruit Garden," recently published, has made the attempt, but not, as I think, with entire success. For the purpose of bringing this subject under discussion I would propose the following terms for designating trees:

1. *Standards.*—These are trees grafted on stocks of their own species, and pruned after the common old fashioned orchard style; that is, with heads five or six feet from the ground, and clean naked trunks.

2. *Pyramids.*—These are trees grafted as standards, but branching out at, or very near the surface of the ground, and trained to a conical or *pyramidal* form—hence the name.

3. *Dwarf Standards.*—These are the same as standards, excepting the size.

4. *Half Standards.*—Trees of size and form between standards and dwarf standards.

5. *Dwarf Pyramids.*—The same as pyramids excepting the size.

6. *Half Pyramids.*—Trees of a size and form intermediate between pyramids and dwarf pyramids.

7. *Espaliers,* and if you please, *Dwarf Espaliers;* no description of which is necessary. These terms are convenient, comprehensive, and easily intelligible.

And now that I am writing, I have a few remarks to make in regard to the cultivation of

The Apple.—Our best educated fruit cultivators here in New-England, do not bestow such attention upon this inestimable fruit as it ought to receive. To the masses of our people, it is certainly the most important of all Pomona's gifts to the regions of the temperate zone. Indeed with regard to the section of country lying between New-Jersey and the *Ultima Thule* of Yankeedom, the apple is the first of fruits, "and there is none second." So important is the apple for culinary purposes, that, without either fresh or dried apples, a kitchen would cease to be a kitchen. Then again what a noble dessert fruit it is! One of the most ancient rites of New-England hospitality is to set a dish of ripe apples before a friend. How many associations of childhood entwine themselves around this noble product of the orchard! The New-England farm-house of the days of our fathers—the brave roaring fire of blazing logs piled one upon another in the glorious old, honest, broad open fire-place; the row of roasting apples spluttering upon the capacious stone hearth, and the good old grandmother at her little spinning-wheel, buzzing away in the corner!

Again—what a healthful and refreshing beverage is, or rather *might be,* made of this fruit! for it well known that with proper care and attention, and from suitable varieties of *grafted* apples, a cider *may be* made which will improve like wine by age, until it almost equals in richness the most highly esteemed products of foreign vineyards.*

But to return to my subject. Wishing some months ago to furnish a friend with a select list for an orchard of one hundred market apple trees, I was greatly surprised at the narrow limits within which I was compelled to confine myself. I was tempted to recommend to set the entire orchard with the *Baldwin* only; for this has proved to be by far the most profitable market apple hitherto cultivated in the Eastern States. But there are obviously some objections—at least so it seemed to my friend—to being confined to only one variety; and so after a great deal of deliberation, I recommended that one-half or more of the hundred trees should be *Baldwins,* and that the balance should consist of *R. I. Greenings, Hubbardston Nonsuch, Roxbury Russet,* and *Porter.*

I hesitated to insert the Roxbury Russet, because it is not a very good bearer, and the fruit seems to be degenerating, three apples in four being knerly, wormy, or otherwise unmarketable. Still I retain it as being *the only* late keeping apple that I could recommend for general cultivation.

We have many other fine apples, I am glad to acknowledge. The *Early Williams,* for instance, is a beautiful, large, excellent fruit, but it is a mortal slow grower. The *Early Sweet Bough* is large, handsome, productive, and the tree grows well; but, as for all other *sweetings,* there is only a limited demand for it, most people considering such apples as valuable merely for culinary purposes. The *Duchesse of Oldenburgh,* Gravenstein, Leland's Spice, Mother, Northern Spy, and Sutton Beauty, all promise well, but none of them have yet earned a well established reputation in this section of the country. The Esopus Spitzenberg and Peck's Pleasant, are apples of exquisite flavor, but are not quite sufficiently productive. The Ladies' Sweeting is handsomer than Danvers Winter Sweeting, but its flavor is only second rate with me; and besides, they are both "nothing but sweetings."

Had my friend been at all inclined to experimenting, I should have recommended to him, as particularly worthy of trial, Duchesse of Oldenburgh, Leland's Spice, Gravenstein and Northern Spy, especially the latter; as we are actually entirely destitute of any *profitable* late-keeping variety of the apple.

You are well aware that a list of apples for market is one thing; a list for home consumption is quite another; a list for an amateur, still something else. The first class must be handsome, productive and popular; the second must be various in flavor and in season of ripening; the third class must be—every thing.

A list of market apples is already given above; I would recommend for home consumption, (flavor, productiveness, &c., taken into account,) the annexed list.

Season.	Dessert.	Sweetings.
Summer,	—Early Williams.	Early Sweet Bough.
Autumn,	Porter. Gravenstein. Hub. Nonesuch. Leland's Spice.	Pumpkin Sweeting.
Winter,	Northern. Baldwin. R. I. Greening.	Danvers Winter Sweeting. Ladies' Sweeting.
Spring,	—Roxbury Russet. (perhaps,) N. Spy.	

In the present state of information in regard to this noble but neglected fruit, I should hardly feel inclined to extend the list farther, pomological conventions to the contrary notwithstanding.

Should the above prove acceptable, I shall at some future time, send you some notices of pears and other fruits. Truly yours, Geo. Jaques. *Worcester, Mass., Nov.,* 1851.

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* Our esteemed correspondent will permit us to express our views in relation to the general use of such wines, in the language of a distinguished individual (P. T. Barnum) as published in the Western Horticultural Review:—"Water is the best thing to quench thirst—it is the best to aid digestion—it forms a large portion of the human body—it is necessary to our life and well-being—and, although I trust I am not a bigot, I, as a matter of duty, as well as choice, eschew with all my heart, all substitutes for that glorious element which a kind Heavenly Father has provided so bountifully for every living thing, and without which the entire animal and vegetable creation must perish." Eds.

Fruit blighted by Hot Weather.

The intense heat of the weather during the fore part of last September, caused immense injury to all kinds of fruit. Apples, peaches, and grapes suffered greatly in all the region round Baltimore, and, I presume, wherever it prevailed. An Isabella vine, that for twelve years past has not failed to perfect an abundant crop of fruit, and last year, up to the first of September, gave assurance of a very large yield, failed to produce a single bunch of perfect fruit. The filling up and ripening of the berries was arrested at the commencement of that hot weather, the berries began to shrivel, the bunches seemed to hang lifeless, and the leaves of the vine to dry and fall off. About one-third of the berries had become dark colored, but did not fill up. On examining other vines about the city I found all in the same condition. None but the earlier varieties ripened. All late peaches became prematurely and imperfectly ripe, and made their appearance some two weeks too early in our markets, small in size, and of imperfect quality. Late apples were also injured, and the fall apples prematurely and imperfectly matured.

How are we to account for this singular effect of heat? I believe the explanation to be this:—

The nutritious juices are thrown into a state of fermentation while exposed to the hot rays of the sun and hot air in the leaves, and thus all the saccharine and other nutritious principles, instead of being sent back to the fruit are evaporated; and thus the fruit perishes for want of nutrition. This theory also explains a similar accident that often occurs to all kinds of plants during very hot dry weather, and which is often called *scalding*. Corn is often very much stinted in its grain by it. We know that the saccharine juice is converted by the assimilatiang organs of the plants into starch, &c. We also know that these saccharine juices possess all the elements of fermentation except temperature. Now it seems reasonable to suppose that if the necessary degree of temperature be supplied by the sun, fermentation will be immediately commenced, and the saccharine principle will be converted into spirits and evaporated from the leaves; and of course the fruit or grain that depended upon this saccharine principle for food, must perish. It is readily admitted that this is all theory; and that, if correct, the evil is without remedy. One, at least, of the readers of the Cultivator would be glad to hear what others. more experienced and skilful, have to say on the subject.

Another idea suggests itself. If the above theory be correct, the fruit and grain thus effected, *dies of starvation*. Can they then be wholesome food for man or beast? Several persons who had partaken of the above described imperfect grapes, were more or less effected with stomach and bowel diseases. No one ever thinks of eating meat from an animal that had *died*, and if it die of starvation it would appear to be much less fit for food. Why should we eat fruit that has perished in the same way? All this may seem speculative and unworthy of attention, but it does seem to the writer worthy of careful consideration. G. B. Smith. *Baltimore, Nov.*, 1851.

Quality of New Fruits.

From the proceedings of that veteran body, the *Massachusetts Horticultural Society*, we copy the following decisions of its able fruit committee, relative to the character of some new fruits:

Melon.—*Christiana*,—very fine—on account of its earliness, flavor, and fine quality, maintains its character ast he best melon for general cultivation.

Pears.—*Beurre de Rhine*, new, green, pyramidal, large, melting, juicy, good.

Beurre Sprin, yellow and red, pyramidal, large, excellent.

Collins, very fine, juicy, and brisk.

Jersey Gratioli, large, obovate, yellow dotted with russet, of a fine vinous flavor.

Beurre Beaumont, very fine.

Bonne de Zees, large, oblong, yellow, melting, sweet, fine.

Beurre Triquer and *Benoist*, melting, juicy, fine.

Serrurier, promises well.

Nouveau Poiteau, alrge, promises well.

Soldat Laboreur, *Colmar d'Aremberg*, *Eyewood*, good.

Apples—*Walworth*, from Clinton county, N. Y., large, handsome, yellow with a flush, tender, pleasant, of fine quality.

Northern Sweet, same origin, very handsome, fine.

Bailey Spice, handsome, fine.

The Diana grape "continues to maintain its high reputation." [So far it appears to have failed at Cincinnati, where also the Isabella is becoming of little value, the Catawba taking the lead there of every thing else.]

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The Best Pears.

C. M. Hovey, of Boston, who has a very extensive knowledge of both old and new pears, gives the following list of nine unexceptionable pears for that vicinity: Bloodgood, Bartlett, Louise Bonne of Jersey, Seckel, Belle Lucrative, Beurre Bosc, Le Cure (Winkfield,) Winter Nelis, and Beurre d'Aremberg. To these he adds the 28 following:—Glout Moreeau, Paradise of Autumn, Dix, Beurre Diel, Doyenne Boussock, Beurre d' Anjou, Fulton, Andrews, Urbaniste, Tyson, Gansel's Bergamot, Rostiezer, Passe Colmar, St. Ghislain, Easter Beurre, Heathcot, Thompson's, Stephens' Genesee, Golden Beurre of Bilboa, Sieulle, Flemish Beauty, Compte de Lamy, Dutchess of Angouleme, Long Green, Marie Louise, Wilbur, Buffum, Lawrence, &c. Some "more recent kinds of equal merit" are not included.

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Large Strawberry Story.

A writer in the *London Gardener's Chronicle*, describes the mode in which a distinguished strawberry raiser obtains enormous crops. It consists, in substance, in the use of a deep vegetable sandy loam soil, or reclaimed osier ground, so situated as to admit of perfect *irrigation*. The latter we know to have an astonishing influence on the increase of size in the growing fruit. The British Queen Strawberry is obtained by the most skilful cultivators of enormous size in that country; yet when that writer speaks of single specimens weighing THREE OUNCES, that is, about as much as a *moderate sized Spitzenburgh apple*, he draws very heavily on the credulity of those who have not seen them.

What Foreigners Think of Us.

Analytical Laboratory, Yale College,
New-Haven, Conn., Nov. 26, 1851.

Messrs. Editors—I take the above subject as one which has often, of late, occupied my own mind, and one in which we as a nation, whether we acknowledge it or not, certainly do feel a strong interest. Sensitiveness on this point, is one of our characteristics, and it is frequently carried to an absurd extreme. Filled with indignation at some foolish mistake, we often neglect hints or suggestions that would be of great advantage, if properly received and acted upon. This should not be so; there was more excuse for it when we were very young and comparatively powerless, but now we have grown to that stature, and to that established character, that we need not turn in a rage upon every snarler that yelps at our heels; we can afford to acknowledge imperfections, and can look every evil report fairly in the face.

With such views as these, I design to devote a few words to this subject, more particularly with reference to foreign reports of our agriculture. Our farmers have for the most part been neglected by foreign visitors, but within a few years this immunity has ceased, and they have received their full share of attention. The ship-loads of agricultural produce that have kept pace with every European demand, have drawn the eyes of older countries to a new and powerful rival; the stories of boundless and fertile alluvial districts, have called men across the Atlantic to visit them, with the special end of deciding what our future would do with the markets of the other continent.

The most numerous of our visitors have been from Great Britain, and it is not to be disguised that their reports of us have, more than all others put together, awakened ill feelings, and caused strong protests against not only the correctness of the authors, but their desire to discover the truth. It must be acknowledged that ground has been given for such charges; when men come here, and scamper hastily over our country, with upraised eyebrows, and stiff, proud reserve; when they greedily swallow every prejudicial report, look out for defects rather than excellencies, and regard every variation from English manners or customs, not as belonging to another people and therefore to be considered in its adaptation to national characteristics, but as differing from an English standard, and therefore to be condemned,—then we naturally feel aggrieved, and insulted, by their misrepresentations.

It is unfortunate that so many Englishmen assume a defensive and hostile attitude toward all other people, immediately on leaving their native shores; that by their air of immeasurable superiority, and haughty condescension, they alienate those who would otherwise fraternize with them most cordially. There are most liberal and honorable exceptions to this rule, but in our American experience, we are constrained to believe that they are exceptions. I do not willingly say these things, but with real regret, for I have lived long enough in England and Scotland, to know and love their people. We may find fault with the British nation, but after all it speaks and will speak for itself. That little island, not so large as some of our single States, exerts a sway far mightier than Rome or Greece ever knew, and is at this moment more powerful than any kingdom of the world.

England has her great defects, her glaring inconsistencies, and what nation has not; but when we see her arms stretching around the globe, her colonies growing and prospering where others have failed or stood still, her sails whitening every sea, her wealth and strength compelling all others to be subsidiary to her aggrandisement and increase, we are filled with astonishment, and cannot but be proud to own such a parentage. The virtues and the vices of the English are in the main ours; indomitable perseverance, restless enterprise, far reaching energy, and strong practical sagacity, are common to the two nations, and these qualities are bringing them together in a friendly contest for supremacy. Already we divide the seas between us, and united can almost without a serious effort sweep every other flag from its surface; united as for the past few years, during the next century, and it seems probable that the English tongue will prevail gradually over all others. The same in the prevailing religion, the same in so many characteristics both of excellence and defect, we should encourage every tie of amity, and while each pursues by all proper means, the path to its own advantage, should frown upon all who in blind prejudice or narrow ignorance, either intentionally or unwittingly, pursue a course likely to sow seeds of dissension between us.

It is then in a spirit of kindness that I would examine in a general way, some of the criticisms that have lately emanated from our fatherland. I do not propose to mention names, but to point out some reason for certain erroneous conclusions.

In the first place, I would say distinctly, that we need not expect any satisfactory results when a traveller goes over our country by railway and steamboat, for a few weeks or months, collecting an item here, and an item there, and then comes out with a deep and profound disquisition upon our minutest springs of action and the causes which influence the most important of our national movements. He who attempts anything of this nature, without any apparent fear of error, or the influence of preconceived opinions, is so evidently superficial that he may be condemned in advance. If the writer has been clearly desirous of giving a candid relation, and has fairly tried, although in vain, to see things in their true light, we can only feel sorry that he has so greatly mistaken his vocation; but if he has been determined to see nothing but what he wished, we are now strong enough to express our contempt for his spirit of blind prejudice, and let our character and history alone contradict him.

It is not by any means my object, to deny that there is no good reason for fault-finding with us, for it is not to be disguised that we have many and glaring imperfections. Our agriculture more particularly, is quite open to animadversion, and the farmers of some districts, sunk in apathy, or armed with hostility toward everything new, deserve all the pungency, both of ridicule and reprehension, that can be bestowed upon them. Yet even here there is ample room for *selection*, as to the points with reference to which they may fairly be blamed. Some defects are inseparable from our present condition; others are the results of our faults and ignorance. It is in the inability to distinguish between these, that most foreigners offend and alienate us.

Any candid observer who considers the circumstances of our farmers, must at once be struck with many conditions that differ so entirely from those formed in the long settled districts of Europe, as to bring us under the operation of an almost distinct set of laws.

The immense extent of rich country still unsettled, where land may be bought for a mere trifle, and the consequent high price of labor, accounts for many of the imperfections in our farming. While broad unbroken forests invite the pioneer to enter, and let the sunlight upon the vegetable accumulations of centuries; while verdant prairies open out almost like the boundless sea, there is a strong temptation to cultivate only for the present hour, to take off crops with no labor beyond that of plowing, and when the produce begins to decrease, to move toward another untouched tract. In this way a rolling shifting tide of population advances, leaving the land behind them in a partially exhausted condition.

Now it is all very well to say that this is wretched farming, and to declaim against our improvidence; but the fact is, that any elaborate system of cultivation would not succeed at all in these new lands so remote from the sea-board. The farmer who attempted to cultivate his land according to the most improved modern systems, would not obtain enough, large though his crops might be, to pay more than half of his expenses, and this for the reason that the conditions of Europe are reversed: in place of cheap and abundant labor and dear food, we have cheap food with scarce and high priced labor. The farmer then in the extreme west, must simplify every process to the last possible degree, before he can make a profit. As we come east into the longer settled regions, the state of society, the value of land, and the abundance of labor, allow of a higher and higher style of cultivation. Still even in our oldest agricultural districts, I of course exclude market gardens, &c., in the immediate vicinity of large towns, there are few if any places where the highest style of English farming, with all its expense of implements, and elaborate finish of cultivation, could be *profitably* carried on.

This is one of the points in relation to which foreigners are often most obstinately prejudiced; they demand the same kind of perfection that they have seen at home, the same implements, the same character of stock. In this they make the identical mistake that they do in condemning our laws and habits, simply because they differ from those to which they have been accustomed. Before speaking, they should consider the force of circumstances.

My opinion is, that in this country a man is a good farmer, whose land is improving under cultivation from year to year, and at the same time yielding him a profit. Thousands of farms in this condition might be pointed out, and yet perhaps not more than one or two would elicit the approval of that class of foreigners described in the preceding paragraph; they do not consider that perfection is relative; a system of cultivation may be essentially as high as any in England, and yet the farmer not be able to afford those niceties of the art which distinguish the best English and Scotch farms the result may be as good, while the system and appliances are cheaper and rougher. In short—while we would aim at the highest perfection, we must still compare ourselves with ourselves, and claim the right to decide what is the best farming on this side of the Atlantic, with only a secondary reference to foreign standards. We would follow all that is profitable and advantageous in the practice of others, but will not submit to be tied to their criterion of excellence.

It is my firm belief that some districts of this country, have improved as rapidly in their agriculture, during the last five years, as any that can be found in the world; but I perceive that it will be necessary to defer any further remarks upon this and other points, until my next letter. Yours truly, John P. Norton.

Milch Cows.

The *American Agriculturist*, in the number for February last, speaking of the "Oaks cow" and the "Nourse cow," said—"We can show numerous instances of larger yielders, whether of milk or butter." In our March number, we asked the *Agriculturist* to point us to these "numerous instances" claimed. In the September number of that paper, (five months after we asked for the information,) there is an editorial article on the subject, in which, in reference to its previous assertion, it is said—

> "We had an impression that many results were on record to verify this assertion, but on recurring to written authorities, we found our convictions had been formed upon *oral* testimony, rather than the more formal and documentary."

The *Agriculturist* next calls our attention to "such brief authority," in support of its original assertion, "as on a moment's investigation has presented itself." Before proceeding to notice this "brief authority," it is proper to say that we called for the information alluded to, simply in relation to the settlement of a fact, and not, as our cotemporary falsely charges, from "zeal for upholding the *natives*." We gave the product of the Oaks cow in butter for three years, as follows: 1814, 300 lbs.; 1815, 400 lbs.; 1816, 484¼ lbs., and desired to know where we could find the proof in regard to the "numerous instances of larger yielders from Short-horn herds."

We obtained the facts in regard to the produce of the Oaks cow from the *Massachusetts Agricultural Repository and Journal*, vol. IV, pp. 254, 255. It appears from the account, that the product put down as for the latter year, embraced but a little over eight months, as follows: She calved April 5th, and suckled her calf till the 8th of May, when it was killed. While the calf was with her, she gave 17 lbs. of butter, and from the time the calf was killed, or May 8th to December 20th, she gave 467¼ lbs.—making a total of 484¼ lbs.—besides fattening her calf to the age of four weeks and five days.

Now, the *Agriculturist* said it could "show numerour instances" in which this product had been exceeded by "Short-horn herds," and we merely asked that the "instances" be shown to us. It has not complied with this request, although it has given two pages of what it calls "brief authority." We have carefully looked over all this, and still ask for evidence of the truth of the first assertion.

We have not room to notice all the so called "authority" which the *Agriculturist* brings forward, but will select a few examples, which may be taken as fair specimens of the whole.

The first example cited, is that of a Short-horn cow mentioned by Youatt, which is said to have yielded 372 lbs. of butter in 32 weeks. To prove that this beats the Oaks cow, the *Agriculturist* says—"Had this rate been continued for 52 weeks, she would have given 606 pounds." Sage conclusion! This is the rule assumed: If a cow will produce, say, 14 lbs. of butter in a week, soon after calving, and will continue to produce at the same "rate" for a year, she will give 728 lbs! Suppose we try the Oaks cow by this rule, and see how she will compare with this Short-horn. In *thirty-two weeks and two days*, the Oaks cow gave 467¼ lbs. of butter; and at the same "rate" for a year, she would have given 785 lbs! But every sensible person knows that such a rule is utterly fallacious, and that such a case as is supposed, could not, in the nature of *cows*, occur—it being virtually impossible that the same "rate" of produce in milk or butter should be continued for a year, that is yielded for a short time after calving. The case mentioned by Youatt is stated in his treatise on cattle, p. 247, (English edition,) where the number of pounds of butter given each week is put down; and the improbability of the same "rate" being continued for a year, may be inferred from the fact that during the last three weeks of the trial, she gave just *seven* pounds of butter each week!

Another example given by the *Agriculturist*, is that of a Short-horn cow owned by Mr. VAIL, of Troy, which in one produced 19½ lbs. of butter. This *one week* appears to have comprised the entire trial. But look at the deduction which our cotemporary makes from it. He says—"Thus, a thorough-bred Short-horn produced over 2 pounds 12½ ounces of butter per day, which rather exceeds the quantity yielded by the Oaks cow." And yet, according to the same article, the Oaks cow produced—"a fraction over an average of 2¾ pounds per day," from the 5th of April to the 25th of September!

Next follows a statement,—on whose "authority," except that of the *Agriculturist*, does not appear, as it is supported by no reference,—in regard to the production of butter from Col. POWELL's cow Belina. It is asserted that she gave an average of sixteen pounds of butter per week from the 20th of September 1830, to the 20th of May following.

The only account of the butter produced by this cow which we have been able to obtain, (although we have written to Col. POWELL on the subject,) is that published in a work entitled "Hints for American Husbandmen with Communications to the Pennsylvania Agricultural Society,"—1827. It is there stated that,

> "Belina produced milk between Thursday morning the 24th, and Saturday evening the 26th [May 1827,] i.e., in three days, from which eight pounds thirteen ounces of butter were obtained—at the *rate* of 20½ pounds per week."

So much for three days. Will the *Agriculturist* inform us where we can find an authentic record of the statement that the cow in question produced sixteen pounds of butter per week from the 20th of September to the 20th of May?

National Agricultural Bureau.

President FILLMORE, in his late Message, reiterates his former recommendation for the organization of an Agricultural Bureau. He says:

> Agriculture may justly be regarded as the great interest of our people. Four-fifths of our active population are employed in the cultivation of the soil, and the rapid expansion of our settlements over new territory is daily adding to the number of those engaged in that vocation. Justice and sound policy, therefore, alike require that the Government should use all the means authorized by the Constitution to promote the interests and welfare of that important class of our fellow citizens. And yet it is a singular fact, that whilst the manufacturing and commercial interests have engaged the attention of Congress during a large portion of every session, and our statutes abound in provisions for their protection and encouragement, little has been done directly for the advancement of agriculture. It is time that this reproach to our legislation should be removed; and I sincerely hope that the present Congress will not close their labors without adopting efficient means to supply the omissions of those who have preceded them.
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> An Agricultural Bureau, charged with the duty of collecting and disseminating correct information as to the best modes of cultivation, and of the most effectual means of preserving and restoring the fertility of the soil, and of procuring and distributing seeds and plants and other vegetable productions, with instructions in regard to the soil, climate and treatment best adapted to their growth, could not fail to be, in the language of Washington, in his last annual message to Congress, a "very cheap instrument of immense national benefit."

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Trial of Reaping Machines.

The English papers inform us of the result of a trial which took place on the 25th and 27th of September, between Hussey's and McCormick's reaping machines, under the auspices of the Cleveland Agricultural Society. It was a trial agreed on by the parties interested in the respective machines, who signed an agreement by which the reapers were placed in the hands of thirteen jurors, who were directed to ascertain which of the two—

1. Cuts the corn in the best manner.
2. Causes the least waste.
3. Does the most work in a given time.
4. Leaves the corn in the best order for gathering and binding.
5. Is best adapted for ridge and furrow.
6. Is the least liable to get out of repair.
7. At first cost is less price.
8. Requires the least amount of horse labor.
9. Requires the least amount of manual labor.

Whichever of the two, so tried, a majority of the jury ascertained to combine the greater number of the above qualities, was to be pronounced the best implement.

The following is the substance of the report of the jury:

> The jury regret exceedingly the most unfavorable state of the weather on the days of trial (a perfect hurricane raging the whole of the first day,) and their consequent inability to make so full and satisfactory a trial as they could have wished.
>
> The machines were tested on a crop of wheat, computed at 25 bushels per acre, very much laid; and on barley at 25 bushels per acre, very short in the straw, and if possible more laid than the wheat.
>
> The jury, taking the different points submitted to them into consideration, express—
>
> 1. Their unanimous opinion that Mr. Hussey's machine, as exhibited by Messrs. William Dray and Company, cut the corn in the best manner, especially across ridge and furrow, and when the machine was working in the direction the corn laid.

2. By a majority of eleven to one, that Mr. Hussey's machine caused the least waste.

3. Taking the breadth of the two machines into consideration, that Mr. Hussey's did most work.

4. That Mr. Hussey's machine leaves the cut corn in the best order for gathering and binding. This question was submitted to the laborers employed on the occasion, and decided by them as above, by a majority of 6 to 4.

5. Their unanimous opinion that Mr. Hussey's machine is best adapted for ridge and furrow.

6. This question was referred by the jury to Mr. Robinson, foreman to Messrs. Bellerby, of York, a practical mechanic of acknowledged ability.

7. That Mr. Hussey's machine at first cost is less price.

8, 9. The jury decline to express a decided opinion on these points, in consequence of the state of the weather.

In regard to the trial, the *Gateshead Observer* remarked—" One thing was clearly demonstrated by both machines—that reaping by machinery is practicable. As surely as the threshing machine has superseded the flail, so certain is it, that the reaping machine will set aside the scythe and the sickle."

Manufacture of Manure.

We have been favored with the annual Report of the doings of the *St. John* (N. B.) *Ag. Society*, for the last year, from which we select the following, from a statement furnished by Mr. Robert Bowes, of the manner in which he manufactures annually large quantities of manure. It is worth remembering.

I have the bog earth raised one year before being mixed with any thing, as muck is so long excluded from the atmosphere and sun that it requires a year's frost and sun and air to absorb the sour water properly out of it, to make room for the rich liquids it is to receive in tanks and elsewhere. I keep my cows in the barn at night, and place dry muck behind them to absorb the liquid manure. The cow stable is cleared out every morning, and the manure is mixed once a week with one load of rich earth to three of manure. Clay loam is the best, if it can be got, to mix a compost, as there is a retainer in clay that other earths are not possessed of. In addition to this, I have in rear of my dwelling house a tank sunk that holds thirty common cart loads of dry muck; this tank is fourteen feet long, seven feet wide, and six feet deep; it is made of three-inch plank, with hackmatack posts and is properly caulked and paved to hold water. When this tank is is filled with the dry muck, there are conductors that convey all the slops from the kitchen into it, as well as all the chamber lye and the soap suds from an outside kitchen; the hearth ashes are likewise put into it in a dry state. In about a month, when the tank gets pretty well filled up with the liquid, it gets into an acid state, and in a few days will ripen and be ready for removal, which is easily known by a disagreeable odour and an increase of yellow flies. In the spring and fall of the year it requires five or six weeks to ripen, as the weather is not so hot. To prevent surface water getting in, the tank has a covering, which is removed when required. I can make at least one hundred cart loads of good powerful manure by this tank in a year. I have manure removed to a large shed at the end of my cow stable, the bottom of which is in the shape of an amphitheatre, from which no liquid can escape. I add one load of earth to three loads of tank manure, which, in the fall of the year, will cover the floor of the shed about four feet deep. The manure from the cow stable is thrown on the top of this through the winter, and spread evenly over it. The roof of the manure shed is constructed so as to admit the rain freely, which washes down the liquid into the compost; but the sun and wind are excluded.

I have a piece of ground, about a quarter of an acre, which was so poor that it would give nothing but weeds. In May last I plowed and harrowed it, and then put on six loads of tank manure, unmixed, to try its strength. I sowed it with barley, harrowed it well, and rolled it. I never saw ranker barley, and I am happy that you saw it, so that you could judge for yourself.

The Primate Apple.

About a year since, we noticed an apple which had been described *as new* in Hovey's Magazine under the unpomological name of " Rough and Ready," remarking at the same time that it was an old variety, having been cultivated in different parts of Western New-York for twenty or thirty years. A late number of that journal furnishes a communication from A. Fahnestock of Syracuse, tracing this variety to eastern origin, and to grafted trees in Western New-York from twenty to forty years old. The oldest name known appears to be the Primate—a name that will probably remain fixed to this variety.

Management of Bees.

Eds. Cultivator—I have been for several years, a successful owner and manager of bees, and am led to wonder that farmers do not more generally include this among their varieties of productive stock. I am confident that, on a comparatively small scale, it makes the most profitable return for the investment and labor required, of all the stocks a farmer can keep. They require no daily feeding, no housing, save the two dollar tenement allotted to each separate colony; no fencing, either for protection or escape; no room, when hung on frames in open order, where grass can grow under them; and no expense of wintering, as they provide their own stores.

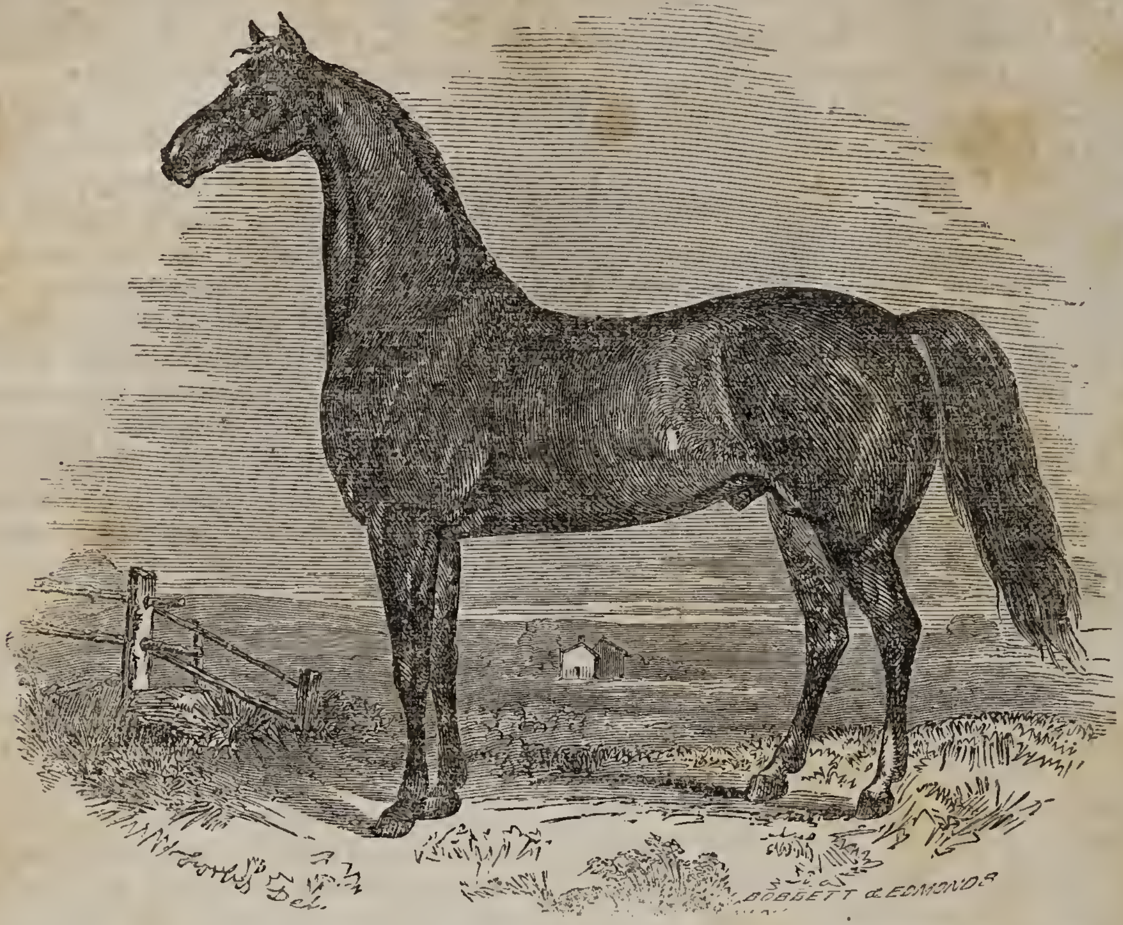
I have a grass plat of about nine square rods, surrounded by a clothes line of tinned wire, which has stood the weather for the last ten years without rusting, and within this are arranged my bees on frames. I cut two crops of grass each season, and have some thrifty young fruit trees interspered. I use Week's Vermont hive, and think it the best in use. My hives are made of pine plank, painted white, so that they neither warp nor allow the comb to be melted in hot weather. I had 28 swarms last spring, and shall sell $150 worth of honey. I may at some future time give in detail the result of several years experience in this business, with some hints on management. H. W. Bulkeley. *Ballston, Oct.* 1851.

Seedling Grapes.

Nicholas Longworth informs us in the Western Horticultural Review, that he has a few thousand seedlings from our best native grapes, and of one superior variety, has 800 plants of extra vigorous growth, and shall be disappointed if he has not grapes of black, white, and red color, among them, equal in the size of the grape and the bunch, to the Black Hamburgh, and its rival in quality. So much for a man renowned for his doubts and incredulity. He says two or three years will test the question.

Chickens versus Insects.

Cuthill says " one bantam is worth fifty toads." He states that his rubbish corner, where all the rakings, leaves, and general refuse of the garden were put, became the grand breeding-place for all sorts of insects He inclosed it with four-feet laths, and placed a brood of bantams there; it is now the most valuable corner of the garden.



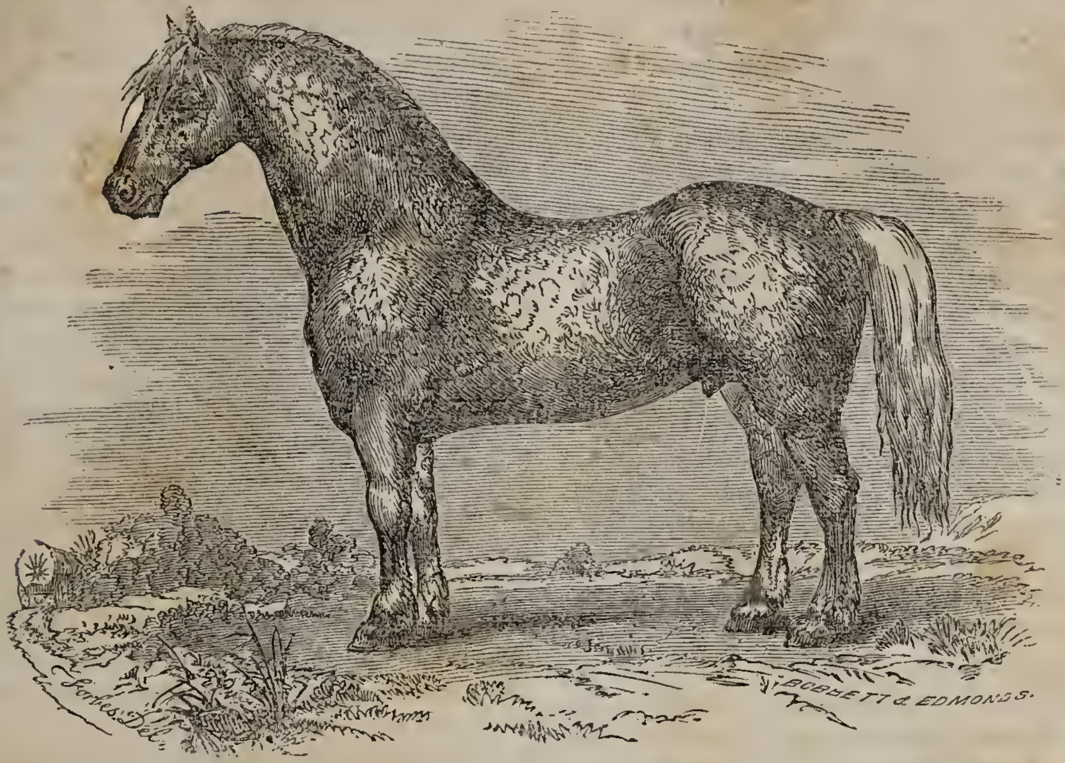
"Consternation," the property of J. B. Burnet, Syracuse,—received the highest premium of the N. Y. State Ag. Soc. on Blood Horses, in 1845, and has received several certificates as the best horse in that class, at several subsequent shows. "Consternation" was imported by Mr. Albott, of Oneida county. He is a horse of good bone and substance, and is the sire of much good stock in that locality.

Farming in Pennsylvania.

Barns.—In that part of Pennsylvania through which we passed, the barns are generally built of stone. They consist of two stories, the lower of which is divided into apartments for horses and cattle, and the upper is appropriated to the storage of hay, grain, &c. The walls are usually very thick—not less than two feet—and being well laid in mortar, are nearly impervious to moisture and air. Windows are placed in the walls at proper places, for ventilation. The large doors are on the side, and teams with loads reach the floor of the second story by means of a bank or wharf made for the purpose. Stationary horse-powers, mostly on the lever principle, requiring from five to six horses for threshing grain, are generally placed in the basement, or in an adjoining building. In some instances these powers are being displaced by the endless-chain powers, which occupy much less space, and are worked by one or two horses. The stalls are very warm—or can be made so—and in winter afford excellent quarters for the animals. In warm weather, they may be cool, but in some instances there appeared to be insufficient ventilation. The fodder is thrown from the upper story through scuttles or holes in the floor, and is then distributed to the various animals.

The practice of pitching hay from the load by horse-power, prevails on many farms in Bucks county. The apparatus for this operation consists of a strong fork, to which is attached a rope passing over a pulley fastened to the ridgepole of the barn, and thence over another pulley attached to the barn-floor. A horse is attached to the lower end of the rope and when the fork is plunged into the hay he raises it by pulling. The balance of the fork when loaded is preserved by a small rope, attached to the end of the handle, and held by a man on the floor, who by slacking the hold of the rope, permits the fork to discharge itself, when it has reached its destined place. By this contrivance the hay is readily raised to the highest parts of the barn. A man, with a boy to lead the horse, can pitch six tons of hay in an hour,—raising it fifteen to twenty feet.

Management of Manure.—The general plan of the barns is tolerably convenient, as respects most of the arrangements; but they differ in some important features from the plan which is most approved in some other sections, especially as to the accommodations for animals and the disposition which is made of the manure. The stalls are daily cleaned, and the manure is thrown into the yard. The impression of a New-Englander, accustomed to depositing manure in a cellar under the barn, would be that this exposure of that substance, spread about as it is over the yard, would be productive of great loss. It is probable that some loss does take place under these circumstances, but to a less extent than would occur if it were not for the fact that the manure is mixed in the yard with a large quantity of vegetable matter. Wheat is largely grown on many of the Pennsylvania farms, and the straw is at intervals spread over the yard, and is trodden in by the stock with the manure from the stalls, which is also spread about the yard. This absorbs



"Clyde," the property of Mrs. **Jane Ward**, Markham, Canada West,—received the first premium in the class of foreign draft-horses, at the show of the N. Y. State Ag. Soc. in 1848, and a certificate as the best in the same class, at the show of 1851. He is of the Clydesdale breed, so celebrated in Scotland, as draft-horses. He is a horse of great size—having weighed upwards of 2,000 lbs.—and evidently possesses great strength, as is indicated by his capacity of chest, muscular quarters and close jointed, sinewy limbs. The chief defect in his shape is a hollow over his loins, which is shown by the figure. The figure, however, fails to give an idea of the massive size, and imposing appearance of the horse, being comparatively too small and light in the body.

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the liquid and prevents the waste of gases from the manure. The urine voided by the animals in the stalls is partly taken up by the litter with which they are (or may be) abundantly supplied, partly soaks into the ground, (the animals generally standing on the ground without any intervening floor) and partly runs into the yard. But with all practicable attention, there is more waste of this valuable liquid than there is where the animals are kept over cellars into which the manure and urine falls, and is there mixed with muck, litter, &c., to any necessary extent. In some instances, it was noticed that there was a drainage of the liquid from the yards—the *extract* of the manure being thus carried into the highway, or a stream, or to some neighboring field where it rendered a small portion of the soil too rich to give good crops. This is scarcely avoidable where there are no means of governing the quantity of water which goes into the yard. In seasons of abundant rain more water will accumulate in the yards, unless it is allowed to run away, than is useful for the proper rotting of the manure. For this reason a sheltered depository, where just the requisite amount of moisture could at all times be secured, and where it would be protected from washing, and from exhalation, would be preferable.

But it will perhaps be argued, that it is necessary to spread the straw and corn-stalks, which are to be converted into manure, over the yard, in order that they may be broken up and made short by the tread of stock—that if the litter were thrown into a mass with the manure, it would not rot well, and hence could not be readily moved with the fork or shovel. The answer to this is, that it is better to cut the straw and corn-stalks with a machine. This is readily and cheaply done by the application of horse-power, and is the quickest and best way of converting these articles into manure. They absorb more liquid when cut, mix better with the manure and offer no impediment to its being worked over for composting, or loaded for carrying to the field. When spread in the yard, and uncut, these substances decay slowly, and even when deposited on the wheat or corn-field, are often in so rough a state as to obstruct the operations of the plow and harrow. This objection would be done away by passing the materials through a cutting machine.

The common practice in the section of which we are speaking, is to spread the manure on the surface of the ground, for wheat and corn, and plow it in three and a half to four inches deep—a very suitable depth for burying manure, unquestionably, though it can scarcely be doubted that it would be useful to loosen the soil, which is of a tenacious tendency, to a greater depth. We remarked in a previous chapter, that the land here is seldom plowed deeper than five inches. It seemed to be the almost universal testimony, that all experiments at a greater depth had resulted injuriously—that the mixing of the underlying clay with the surface soil, tends to sterility. Some examples of this kind were detailed to us, by persons whom we regard as entirely reliable; but no trials at subsoiling, so far as we learned, had been made in this district. It would be highly desirable to ascertain what would be the effect of loosening this clayey stratum, thus opening it in some degree, to the action of the air, and giving to the roots of plants a wider extension.

It should have been mentioned when speaking of the course of cropping, that it is usual to apply about fifty bushels of lime, fresh from the kiln, to the acre, once in six or seven years. This costs ten cents per bushel. Experience, we are assured, has demonstrated the usefulness of this application, though the specific effect of the lime may not be fully known.

FENCES.—These are generally made of posts and rails. White cedar affords the best rails; white oak is much used for posts. Cedar rails will last forty years, oak posts twelve years. The rails cost nine dollars per hundred—the posts the same. The cost of the fence when set, is fifty cents per pannel, of eleven feet—four rails to the pannel.

Frequent attempts have been made to raise hedges of various kinds of thorn. These attempts have mostly failed. The thorns do not grow well, and their proper management in hedge form is often neglected. It is the opinion, however, of judicious farmers, that such post and rail fence as has been described, is on the whole, most economical—that the interest on the additional sum which a hedge, or some more permanent fence would cost, would more than support a fence of the former material. Most of the fences here are well put up, present rather a neat appearance, occupy comparatively little ground, and form a good barrier against stock.

HORSES.—The horses appear to partake in a great degree, of the character of the Dutch stock, introduced by the early emigrants to this district. They seem to do tolerably well for common farm purposes. They are large, and throw so much weight into the collar, that they readily carry large loads. But in general they are not quite the right kind of animal even for draft. Their defects are, being frequently long in the back, not well ribbed up, inclined to be pot-bellied, long-jointed, with a laxness of tendon and muscle which unfits them for endurance. They tend to carry much flesh, and when in high order, as they often are, make a showy appearance, and please the eye of the cursory observer. There are exceptions to this description, and animals may be found which are comparatively free from these defects.

In a few instances we met with horses begotten by the noted Norman horse imported and owned by EDWARD HARRIS, Esq., of Moorestown, New-Jersey. They are generally excellent, as farm horses,—much more strongly made, and of better action than the Dutch stock. A general cross with such a horse as Mr. HARRIS's, would be a great improvement in those parts of Pennsylvania which we visited.

CATTLE.—Most of the cattle which we saw, appeared to be of mixed blood, and mixed too, without regard to any particular rules or object. In some neighborhoods the blood of the Short-horn was very obvious. On some farms the full bloods of that breed had been tried—the stock having been obtained from the herds of Messrs. POWELL, WOLBERT, COPE, and others. The general testimony was that they were not sufficiently hardy, and had not, on the whole, manifested any superiority for the dairy. Some herds of cows were met with, which were a cross of the Short-horn with other stocks, whose dairy properties were evidently good. As examples, we might name those of Messrs. JOHN FEASTER, JAMES C., DAVID, and ADRIAN CORNELL, Jr,, near Newtown, Bucks county. Mention was made of the latter in a former chapter. These men have bred their cows with an object. That object is a good yield of butter, annually, and a profitable return of the animal in the shape of beef at last. They have already attained a very creditable success, and by continuing a judicious course, this success will be increased. Mr. JAMES C. CORNELL keeps twenty cows, and they average over 200 hundred pounds of butter each, in a year, besides the new milk and cream used in a family of fourteen persons. His cows are well-shaped, hardy, and thrifty, but have not the extreme tendency to fatten which would injure or destroy their value for the dairy. He has a cow which is half Alderney and half Holstein, which has given 15¾ pounds of butter a week, on grass feed.

SWINE.—A variety called the "Chester county breed" prevails in some neighborhoods. It is a white hog, of enormous frame, loosely put together, a thick, heavy *flop* ear, large tail, too heavy for the animal to curl, and a general character indicating coarse quality of flesh. The animal is not destitute of fattening properties, and at eighteen to twenty-four months old, not unfrequently attains the weight of 600 pounds, dressed. But it is often the case that their disproportion and looseness of structure is such that they break down, and become almost totally helpless, with not more than two-thirds this weight. The variety appeared to be losing favor with many farmers. The Berkshire, and what appears to be a cross of the Leicester breed, under the name of the "Dutchess county hog," was seen on several farms. Either of the latter is far preferable to the former.

SHEEP.—Comparatively few sheep are kept in the section we passed through, the farmers in general deeming them less profitable than cows. Those which are kept, are of the breeds adapted to mutton. The Leicesters, Cotswolds, and South-Downs, are occasionally met. Mr. AARON CLEMENT, of Philapelphia, exhibited some good specimens of these. The Broad-tailed African sheep were introduced into Pennsylvania from Tunis, by Col. PICKERING, while Secretary of State, upwards of sixty years ago. Traces of their blood are still distinctly visible in the sheep of this section. They were a hardy race, and the first crosses with the common stock were thought to be particularly valuable as early lambs for market. But the objections to the stock were, that they were not prolific, and that the fat tended to accumulate chiefly on the outside of the rump, and more than any where else, on the tail, which, in the full bloods, sometimes became eight or ten inches wide, and weighed ten pounds or upwards.

It is reasonable to believe that in the vicinity of a large city, like that of Philadelphia, there are farms on which mutton might be fattened to good advantage; and with the facilities of communication by railroad, which are now becoming extensive in Pennsylvania, an increased attention will be profitably devoted to this branch of business.

THE SHEPHERD'S DOG.—Without the shepherd's dog the whole of the mountainous land in Scotland would not be worth sixpence. It would require more hands to manage a flock of sheep, gather them from the hills, force them into houses and folds, and drive them to markets, than the profits of the whole stock would be capable of maintaining.

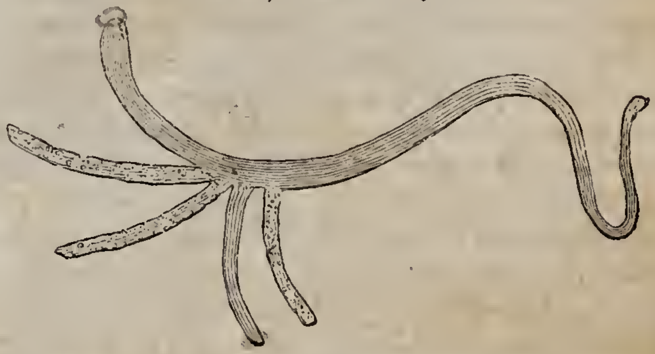
Singular Disease in Cattle.

Editors Cultivator—Having met with a disease in calves and young cattle, which I have not heard spoken of, or seen described in any farming work, I have concluded to send you a description of it, in hopes some of your subscribers may give us some further information on its cause, cure, or a prevention. About a year from last August, three of my Ayrshires calves, some four or five months old, that had been weaned from the cows and were kept in a pasture lot adjoining the farm-house and fed on milk twice a day, were attacked, apparently, with cold, accompanied by a bad cough. I physicked them with sulphur, shifted them in a lot of fine young grass, with a shed for them to go under during the heat of the day or when it rained, gave them fresh milk or water to drink as they choose; but all to no effect, as they continued to cough as much as ever, and two of them became very thin; the other appeared to have a good appetite and kept fat. One of the lean ones died. I had it opened, and in its bronchus or windpipe, I found nearly half a pint of thin whiteworms, somewhat similar to the gap-worms in fowls, having five instead of two trunks, much longer bodies, about the thickness of a gap-worm, but white instead of being red as the gap-worm is. From the position in which I found them, they appeared to have collected together in a mass or bunch, and to have strangled the animal. They were perfectly alive when I examined the calf some hours after its death, and continued to move about while I was examining them under the miscroscope. With one of the remaining calves I attempted to remove or loosen the worms, as you do the gap-worms in poultry, but neither I nor my assistant succeeded in getting the tongue far enough out to see the aperture of the windpipe, so we gave it up; but a butcher afterwards told me there would have been no difficulty in doing it, if we had pulled the tongue out on one side of the mouth, and then the bronchus or windpipe might have been cleaned out with a large feather. The two other calves died about a week after the first, on the same night, and upon examining them, I found about the same quantity of similar worms in the bronchus of the lean one. The fat one had very few worms in its bronchus, but upon examining its lungs I found quite a number throughout the air vessels of the lungs.

I have before this lost cattle, I have no doubt, with the same disease, from the cough and other symtoms being precisely similar, but considering it in them an inflammation of the lungs, I never thought of examining their bronchus or windpipes, but being in the habit of operating on poultry for the gaps, I thought this might be somewhat of a similar disease, and was thereby led to the examination.

The only manner in which I could account for the disease in these calves, was from their having inhaled some minute insects which had been bred in the milk, which was left standing in the sun, and that the eggs of these animals had turned into these worms, as I had frequently observed myriads of almost imperceptible flies hovering over the tub in which the milk was poured for the calves. So this summer I raised four calves in the same lot, but took the precaution to have them fed from pails which were removed and washed out as soon as the calves had fed, and they had nothing of the gap or bronchial disease.

In page 305 of the 1st. vol. of your new series of the Cultivator, you published an article on the subject of gapes in chickens, &c., since which time I have practiced the mode there described, on chickens, turkeys, and goslings, with perfect success, and am of opinion, that if you make use of a feather of an appropriate size, to the bird to be operated on, and go leisurely and carefully to work, you will never fail to cure the fowl. With some of my goslings they were so large that I had to splice two quills together, making them over a foot long, to enable me to reach the bottom af the windpipe, and I then removed twelve large gap-worms from each of them. My ducks have never had the gapes; whether ducks are obnoxions to that disease, I cannot say.



Herewith I send you a drawing of the bronchial worm taken from the calf's windpipe, as it appears when magnified; three of the trunks or tubes are filled with eggs, similar to the female gap-worm. I remain yours, &c. Charles F. Morton. *Mortonville, Orange Co., N. Y., Nov. 26, 1851.*

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Agricultural Economy.

Do our agriculturists study economy as attentively as they ought to do? I do not mean economy in the ordinary sense—in expenditures, saving every *cent* they can, and stinting *supplies*. I mean the economy of management. True economy adapts means to ends, applying no more or less of the one than is necessary for the completion of the other. For example, ten acres of land well prepared and thoroughly tilled, will produce five hundred bushels of corn. The economical farmer, therefore, who intends to produce that amount of corn, will not use twenty acres of poorly prepared, and badly tilled land, to accomplish it; because the same amount of crop will require more labor on twenty acres, in plowing and tilling, however imperfectly performed, than it will on ten acres, however well it shall be tilled and prepared. Again, if a farmer have an hundred loads of manure only, if he study economy, he will rather apply it all to a small piece of land, and thus manure it well, than to a large piece, and thus manure it very imperfectly; because, in the former case, it will require less labor to produce a given amount of crop, than in the latter. Again, a farmer that has a given amount of manure, will apply it in sufficient quantity to as much land only as it will supply with sufficient fertilization, and thus, by annually improving a small piece, at length render the whole fertile. So, also, the owner of a large tract of land will attempt to cultivate only just so much of it as his forces can cultivate thoroughly. Two farmers, each with the same number of acres, and the same amount of labor, shall show very different balance sheets at the end of the year, the one footing up $1,000 profits, and the other $500, simply because the one studies economy in the application of means to ends, and the other takes no thought of the matter.

One great fault of many farmers may be found in a peculiar passion for large fields. How much wheat will you put in this fall? 250 acres, 500 acres, &c. The question should be, how much wheat will you *produce* this year, and the passion should be for the large yield, instead of the large surface seeded. The New-England farmers differ from our middle and northern state farmers in this. The former study economy in all things. They cultivate no more land than they can cultivate well. They do not weaken the result of their forces by diffusion, but strengthen them by concentration.

There is much want of economy also, and much loss, in not closely attending to times and seasons. We continually hear farmers complaining that they have not yet got their land prepared for fall seeding, and now the weather will not admit of its preparation; one has not finished planting his corn yet; another had not secured his harvest before the rain set in, and it is beginning to sprout. As a general rule, there is a time and a season for every thing to be done on a farm, and those who are late in any thing, must expect to suffer the consequences. To study the economy of times and seasons, is as much a part of the science of agriculture, as is the proper adaptation of means to ends; and both are as necessary to success in farming, as a correct application of skill in mechanics is necessary to success in any mechanical employment. Many of our farmers seem to sleep all winter, wake up in the spring, late or early, *as it happens*, and go to work when the humor moves them, without system or forethought, go ahead as chance may lead through the summer, and in the fall grumble at the failure of their crops from unfavorable seasons. If any one takes this to himself, let him,—I mean it for *him*. AN OBSERVER.

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Harvesting Corn.

EDS. CULTIVATOR—On looking over the pages of the Cultivator for September, I noticed an article on "Harvesting Indian Corn." The subject is one of great importance, and comparatively little understood.

With a view to more light, I have conducted a few experiments with some degree of care and accuracy, although upon a limited scale. Fearing some of the numerous young farmers who look to the Cultivator for advice, may be led to the belief that Mr. OLIVER MOORE, in an article in the October No., has proved that corn left to ripen in a natural, or uncut state, produced the greatest weight of grain, I send you the result of my experiments thus far, and intend to pursue them farther as opportunity presents.

About the middle of September, when the corn had done growing, and the ends and edges of the leaves began to turn brown, I selected a place of uniform appearance in soil, size, and ripeness. I then proceeded to cut close to the ground across five rows, taking two hills from each, and placing them together in an upright position, binding the tops tightly. Next, topped, or cut the stalks from an equal number of hills in the same rows. And lastly, left two hills natural, in each of the same rows, making thirty hills in all, or ten of each kind. On the 7th of November I husked and carefully weighed each parcel, separately, with the following result:

10 hills—cut close to ground, ...	13 lbs. 13 oz.
10 hills—stalks cut off above the ear,.......	13 lbs. 6 oz.
10 hills—left natural,......................	12 lbs. 13 oz.

This experiment was made in 1849, and in the following autumn I made one similar in every respect, except the number of hills, which were double the former, and the time of cutting being the 10th of September. Time of husking being also about twenty days earlier. Result as follows:

20 hills—cut close to ground,...............	29 lbs. 14 oz
20 hills—stalks topped,.....................	26 lbs.
20 hills—left natural	25 lbs.

I find the following note in my experiment book, made at the time of husking—"Again, as last year, the corn cut and put in stook, is much the soundest, and in the best condition."

It will be perceived that the experiment of Mr. MOORE and the above, do not agree—he having arrived at the conclusion that "the most corn will be produced by letting the corn ripen in the order of nature." While I am about ready to conclude that the theory of Liebig is correct, that "all plants left in a natural state to mature their seed, give back to the earth in the form of excrementitious matter, a portion of their seed-forming substance, thereby diminishing the weight of the grain or seed," yet if the stalk be severed before the downward flow of this substance shall have commenced, it must be retained either in the stalk or the grain, or perhaps in both.

The above experiments show clearly a greater weight of grain on cutting near the ground, in the first instance, of nearly half a pound, over that topped, and just a pound more than that left natural. In the second, only two ounces short of four pounds over that topped, and two ounces short of five pounds over that left natural. That left in a natural state weighing least each time. It is my intention to continue the experiment farther, and double the number of hills each time. I should have done so this fall, had I not been absent during the corn cutting season. G. W. COFFIN. *Amenia, Nov.* 3, 1851.

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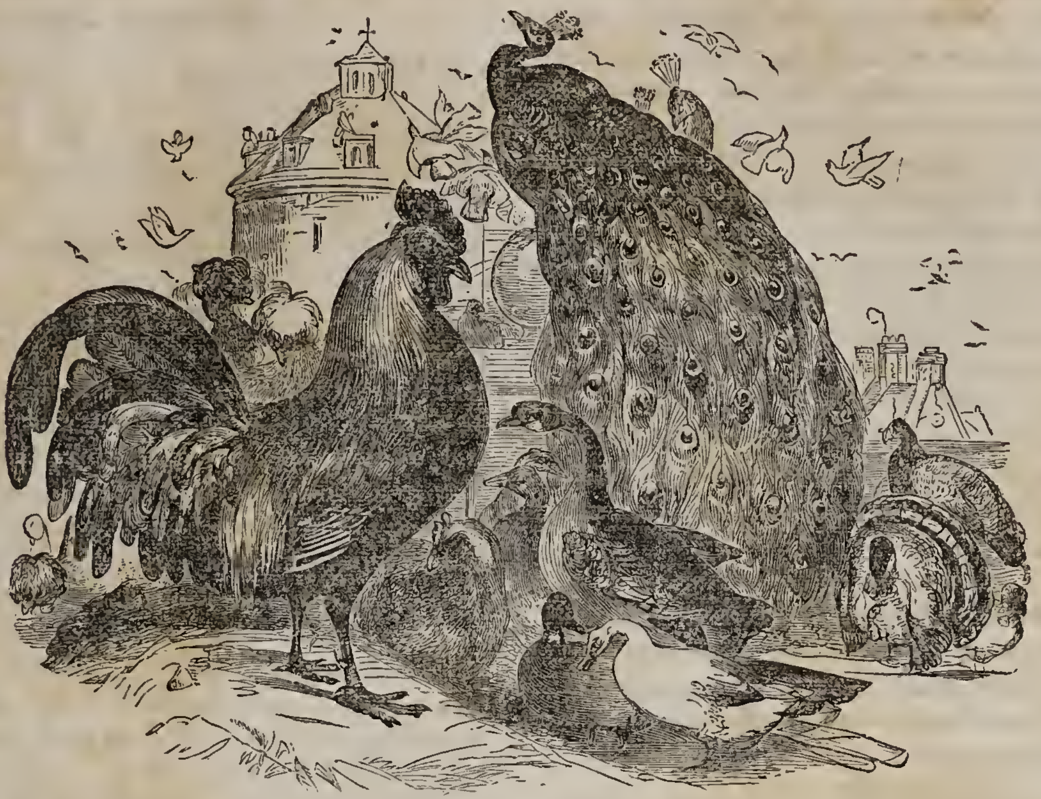
On the Culture of the Onion.

EDS. CULTIVATOR—As I have devoted some of my time to the cultivation of the onion, this last season, I have thought it to be an act of kindness to give your numerous readers a short sketch of the success I had in raising them. I made choice of a piece of wheat stubble in the spring, and hauled on leached ashes about two inches thick. Then I hauled on barn-yard manure, at the rate of 40 loads to the acre. After this I plowed it about eight inches deep, about the last week in May. On the second day of June, after I had it leveled off pretty well, I made shallow drills with the hoe, one foot apart, and drilled the seed therein, and covered it with a rake. About two weeks after the plants were up, I thinned them out to six inches from plant to plant. Shortly after I weeded them, and put on rotted and half-rotted



manure, as a top-dressing, between the plants and between the rows, to the depth of about one inch. I weeded them once more after the top-dressing was put on. The onions grew to the astonishment of all those who cast their eyes upon them, and turned out at the rate of two hundred bushels per acre, some of which measured fourteen inches in circumference. They sell for six shillings per bushel, which you see would net $50 from one acre. JOHN DIEHL. *Bristolville, O., Oct.* 25, 1851.

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Ornamental Poultry.

In many situations there is an object distinct from pecuniary profit, in keeping a variety of poultry. This object is the ornament they add to the premises, and the pleasant interest and instruction which their characters and habits afford. The country-seat of the gentleman of wealth, cannot be considered complete without this appendage. One reason why it is so seldom found in this country is, probably, the want of proper information in regard to the management of this kind of stock. A leading cause of the disappointment and failure of those who have attempted to form collections, has been the difficulty of preserving the health of the birds.

The writer had lately the opportunity of examining the poultry-establishment of Mr. JOHN GILES, of Providence, R. I., a few remarks in regard to which, as it is one of the most noted in the country, may benefit the public.

We noticed in Mr. GILES' yards, the following species and varieties:

Of the *Gallus genus*, (fowls,)—Cochin-China, Black Spanish, Surrey, Speckled Dorking, White Dorking, Black Bantam, White Silk China Bantam, Sebright Bantam. *Pheasants*—Silver, Golden, Ring-necked, White, Bohemian. *Geese*—Indian, or Chinese, Canadian, or wild, Egyptian, Bernacle, Brent, Snow-goose. *Ducks*—Aylesbury, Rouen, White top-knot, wild Mallard, wild Black, Gadwall, Red-headed Pochard, Tufted Pochard, Pintail, Whistling, Wood, or Summer, Guernsey Widgeon, Summer Teal, Penguin. *Pigeons*—ten varieties. Partridge, (Ruffed Grouse,) and Quail.

Altogether, it is the most beautiful collection we have ever seen. Particularly worthy of note, was the healthfulness of the stock, their quietude, and evident enjoyment—indicating that all the requisites of their nature were provided for them.

The great secret of Mr. GILES' success is care. Strict attention is paid that each fowl is placed in a situation adapted to its wants. If the weather is too hot, it can resort to cool shades; if too cold, it can find shelter in apartments which furnish a congenial temperature. The aquatic tribes can gratify their instinct and brighten their plumage by a douse in the purest water; and the half-reclaimed land species can enjoy the secrecy afforded by shrubbery and trees.

Two great points in the general management, are *cleanliness and wholesome air*. To secure these, all the apartments are thoroughly plastered inside, and are provided with openings through the roof (which can be closed at pleasure) for ventilation. The bottom is earth, the surface of which is frequently renewed by a fresh layer. The manure is swept from each apartment every day, and a thorough airing is given whenever the weather will justify it, which prevents the origination of noxious gases. The plastering prevents the harboring of lice, which are frequently so injurious to fowls; but should it be necessary, a thorough fumigation of the apartments, with sulphur or tobacco, can be given.

With such conveniences and precautions, Mr. GILES has been little troubled with diseases among his fowls. That malignant and contagious disease called roup, has sometimes made its appearance among them, having been contracted by specimens taken to poultry exhibitions, or from diseased subjects being inadvertently introduced into the yard. Fowls that are attacked with roup, should at once be taken away from others. The head should be frequently washed with castile soap-suds, and cathartic medicines, as castor oil, and sulphur, have been administered with apparent success.

The inner yard for the poultry, contains about a quarter of an acre, of which thirty feet square is water. In addition to this, most of the fowls have a range in adjoining enclosures, containing from two to three acres. The water for the goose and duck-pond is supplied by a pump, worked by a steam engine, which furnishes the motive power for a worsted factory belonging to Mr. GILES. The pond is walled around the sides, and the ground for several feet from the water is paved, which prevents the formation of mud, and keeps the pond and the fowls clean. The water is five feet deep, and gold-fish are bred in it in great numbers.

The mode of feeding adopted by Mr. GILES, is to give, on alternate days, Indian corn, buckwheat, millet, hemp-seed, and barley. Occasionally the fowls are fed with equal parts of corn-meal and shorts, with a little sulphur mixed.

Mr. GILES has taken great pains in obtaining his stock, and is very particular in regard to the purity of the different kinds. Many of his choicest specimens were obtained direct from Messrs. BAKER, of London, who are probably the most noted breeders and dealers in ornamental poultry in Europe.

The Boston Poultry Show.

The annual exhibition of the New-England Society for the Improvement of Poultry, took place at Boston on the 11th to the 14th of November last. The show was much inferior in respect to numbers, to the shows of the two previous years, and the number of varieties was also somewhat less than on those occasions. The whole number of specimens exhibited, is stated by the secretary to have been 2,458. Of the Gallus genus, the large Asiatic fowls, as heretofore, took the lead. This tribe has a general tendency to coarseness and too much offal; but the specimens exhibited, showed considerable improvement in symmetry over those presented at the former shows. It is practicable to produce a good stock from this tribe, by careful selection for several generations. The (white) fowls exhibited by A. A. Andrews and Dr. E. Wight, Boston, those by A. White, East-Randolph, and those of the "Forbes stock" exhibited by Mr. Brackett, Newton, showed that an important advance has already been made in this direction.

Of Spanish fowls, some really splendid specimens were exhibited by J. P. Childs, of Woonsocket, R. I. The history of this stock, as given by Mr. C. is, that they were brought from near Bristol, England, by John Fricker, in 1850, who stated that he knew them to have been bred for more than fifty years, without crossing. They are beautiful in form, and of larger size, in general, than any Spanish fowls we have before seen—the hens weighing upwards of six pounds each, and the cocks large in proportion.

Very handsome Dorkings were shown by Dr. Wight and A. A. Andrews, Boston; Guelderlands,—a good sized, raven-black fowl, destitute of comb,—by H. L. Devereux, Boston; Bolton Grays, or Creoles, by George Dorr, Dorchester, and John F. Brown, Woonsocket, R. I.; good game fowls by O. and S. Southwick, Danvers, O. M. Stacy, and E. Varney, Lynn; Golden Polands (or top-knots) by W. B. Parsons, Rockport—very handsome; Sebright Bantams,—good except too large in size for that variety,—by Chas. Sampson, Boston.

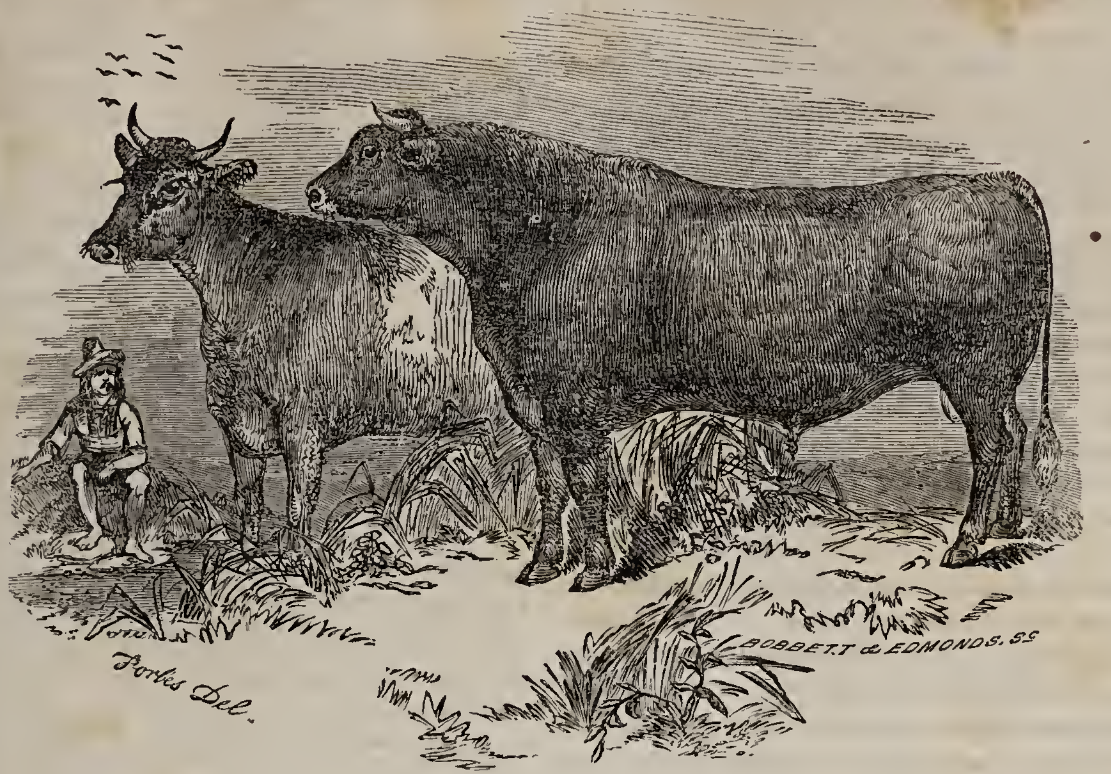
There were good specimens of turkeys, geese, (the Bremen best and most numerous,) ducks, and pigeons; but nothing particularly rare was noted in these classes.

Long-Island Lands.

In the central part of Long-Island, there are large tracts of land which have never been brought into cultivation. Public attention has lately been turned considerably towards these lands, through the influence of Dr. E. F. PECK, of Brooklyn, who is the proprietor of several thousand acres, situated in the vicinity of Lakeville, on the L. I. rail-road.

These tracts have formerly been deemed of very low value; but no reason exists why they are not naturally as valuable for farming purposes as the coast lands which lie on each side of them, and only four or five miles distant, at Smithtown and Islip, where farms are held at a hundred dollars an acre. The soil is of similar composition, and the indigenous vegetation was the same. The writer speaks from personal observation, having examined the lands in November last. If it is claimed that the shore lands have an advantage in respect to the facilities for obtaining materials, (as fish, sea-weed, &c.) for manure, it may be replied that this is more than counterbalanced by the advantage of being near the railroad, which is the main avenue of communication. In fact the only real or apparent advantage in the former case, is that resulting from the different social circumstances of the two neighborhoods. On the coast are villages, with the various appurtenances of old settlements, while on the Lakeville tract, settlement has but just commenced. But it is probable that this state of things will continue long, as, in addition to equal agricultural advantages, the Lakeville lands present good inducements for city people to furnish themselves with country residences. They can be reached in about two hours from New-York or Brooklyn. The railroad divides the tract nearly in the centre, north and south, and it is also nearly in the centre of the island, in the same direction. Near this central line is an elevated ridge, which forms the height of land between the north and south coasts. The top of a dwelling of two stories high, placed on this ridge, would command a view of both shores,—either of which could be reached in an easy drive of five miles. Near the ridge alluded to, and within a mile and a-half of the railroad station at Lakeville, is Ronkonkoma lake, a beautiful sheet of water, nearly circular in form, and about a mile across. The water is perfectly clear and sweet, and abounds with fish, (red perch); the bottom is hard and pebbly; the shores, free from marshes, gently shelving to the water, with a beach, which, with but little labor, would form one of the pleasantest walks, or carriage drives, entirely round the lake. The level of the lake is very uniform, being but little affected by rain or drouth.

Few sections can boast of such attractive sites for rural dwellings, as the vicinity of this lake affords. There is sufficient unevenness in the surface of the ground, to admit of much beauty being imparted to the landscape by tasteful cultivation and improvement. The healthfulness of the location is undoubted, as the longevity of the inhabitants of Long-Island is proverbial; and when a beginning is once made, and this cannot be long deferred, which shall constitute the nucleus of a good neighborhood, these advantages will be highly appreciated.



Hungarian bull and cow, the property of R. L. Colt, Paterson, N. J.,—received premiums in the class of foreign stock at the show of the N. Y. State Ag. Soc., 1851. These cattle evidently belong to a very distinct breed—we have seen none which appeared to be more so—and have qualities which would render them desirable in certain locations. Their introduction to this country is an experiment, for which Mr. Colt is entitled to credit. They are hardy, and show much fattening property. The figures herewith given do not give so favorable an impression in regard to the animals, as they are entitled to. That of the bull is fair, but the cow has a rough wild expression which does not belong to her.

Using Bones for Manure.

Eds. Cultivator—Can you, or any of your correspondents tell us how to use bones and horns to the best advantage, in the absence of all mills for grinding them? D. J. Beardsley. *Portage co., Ohio, Nov.* 1851.

Bones are used in three ways—1st. By cracking them with a sledge into fragments from half an inch to an inch in length; 2d. By grinding into powder; and 3d. By dissolving in sulphuric acid. The first forms a durable manure, but as the fragments dissolve slowly, it is the least powerful of the three. The latter, by completely dissolving the bones, renders the same amount several times more active and powerful than even by grinding to powder.

On page 52 of the Cultivator for 1851, our correspondent will find a description of the mode of dissolving bones by sulphuric acid, bearing in mind that as great heat is produced by the mixing of the acid with water, it must be added gradually by successive portions at intervals of some hours. The acid, bought by the carboy (or large bottles) will cost from 2½ to 3 cents per pound, the expense of which will be well remunerated by the great fertilizing power of the manure. But in places quite remote from large cities, it may be hard to obtain; in such cases, one of the following *new* methods may be tried, and may by experience prove valuable:—

The first is *steaming*, as described by Prof. Norton on page 270 of our last volume, and which is probably the cheapest mode for dissolving large quantities. Prof. Norton has since informed us that sufficient heat cannot be obtained with less than a pressure of 30 lbs. on the square inch, or two atmospheres.

The second mode, is by *fermentation*. This is described on page 83 of our last volume. It has as yet been but little tried, but if it can be successfully reduced to practice, it may possibly prove the most convenient and cheap mode of reducing them to powder, under ordinary circumstances.

Levi Bartlett, of Warner, N. H., describes in the *Journal of Agriculture*, various modes by which he has prepared bones for manure. He has come to the conclusion that the best way is to boil the bones for a short time, and while hot mix them with unleached ashes, the whole to be covered with loam or muck to retain the heat and absorb the ammonia which will be set free. In a few months, the bones would be decomposed.

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Potash for Manure.

"Will you, or some of your correspondents inform us if potash will not answer the place of ashes in compost, if rightly applied—and if it will quit cost?" P. Pratt. *Deep River, Conn., Nov.* 14.

Potash would undoubtedly form a valuable constituent in composts; but where ashes can be had, they are cheaper and better, because the cost of extracting the potash separately is avoided; and better, because ashes contain several other valuable ingredients besides potash, such for instance as lime, gypsum, and phosphates. The relative cost of ashes and potash may be ascertained to some degree of accuracy by determining first the cost of a pound of ashes, and a pound of potash, and then finding the proportion in the ashes, which in beech and oak is about one seventh to one tenth. Whether ashes or potash will "quit cost" is only to be determined satisfactorily by careful experiments on the particular locality and soil under trial, accompanied with accurate weighing and measuring for some years.

Shelter for Fattening Stock.

At a late discussion by the members of the Highland Agricultural Society, in reference to the winter management of stock designed for slaughter, all the speakers agreed that it was most economical to shelter the animals—that this mode effected a saving of food, and at the same time there was a greater gain of meat. The extra gain is doubtless owing to the food which would be consumed in keeping up the necessary warmth of the animal under exposure, being converted into flesh and fat, when the animal is placed in a genial temperature. One of the speakers, who had fattened many cattle, said his rule was to keep them in such a degree of heat, that their skins when touched felt damp with perspiration, but not so warm as to make the perspiration run from them. A similar rule has been adopted by successful feeders in this country.

Crushing Grain for Work-Horses.

Owners of work-horses are too regardless of the advantages of grinding or crushing the grain fed to them. They do not consider that the expenditure of muscular strength by the animal, in grinding grain with its jaws, is as great a waste of its energies as an equal outlay of strength in any other way; and that besides this, there is much waste of grain from its being imperfectly digested. When the animal is fatigued, he masticates his grain imperfectly, and it often passes through the intestines with so little change that it germinates and grows well. By crushing the grain, this loss would be saved. Another advantage would be, that different kinds of grain, as Indian corn and oats, when ground, could be mixed together, and incorporated with cut straw or hay—experience having shown that this is the most economical way of feeding. Where power mills are not within convenient distance, mills which can be worked by horse-power, or by hand, may be used. Sinclair's will answer well; a horse will grind four to six bushels an hour with it, and it can be worked with two men. It costs $35.

Salting Pork for Summer Use.

Eds. Cultivator—Last fall, I saw in some paper, a recommendation which struck me so forcibly as being good, that I tried the experiment, and with perfect success, and I would recommend that you publish it in the Cultivator. It was as follows:—In packing pork for summer use, add to each layer of pork, a sprinkling of fine ground black pepper. I put about two pounds pepper to a barrel of side pork, containing about 400 pounds. I have been a house-keeper for nearly forty years, and I can truly say that I never had pork keep so sweet and fine. We are now using old pork, as good as if it had not been put up over a month. O. F. Marshall.
Wheeler, N. Y., Nov. 19, 1851.

Morgan Horses.

One of the editors of the *American Agriculturist*, who attended the Vermont State Fair, makes the following candid and judicious remarks in regard to this stock of horses:

"One of our correspondents has recently characterised the Morgan horse a humbug. We wish there were more such agricultural humbugs. He has equally failed in characterising this fine family of horse flesh. He has evidently drawn his ideas from the throng of miscellaneous brutes that have been picked up by jockeys of every hue, and palmed off among the unsophisticated wherever such customers could be found. Of course, there is no such thing as a *pure* Morgan horse, as their origin dates from a single animal, and less than 60 years ago. But they have had about the same period to form a peculiar race as the Ayrshire cattle, and their success is fully equal. They are not homogeneous in form, appearance, nor character; but they are enough so to be entitled to the possession of a distinctive family name. There are wide departures from their general resemblance, in many of the progeny that are bred from uncouth dams. We have seen some over 16 hands high, and some scarcely 12; some with steep rumps, big heads, and dull eyes, or sluggish gaits, that were *called* Morgans, and probably enough were gotten by them, but the characteristics of the dam were too potent to be subdued by a single cross. In conclusion, we are compelled to say, that the *true type* of the Morgan horse is as desirable an animal for the road, whether our taste, or convenience, or pockets are concerned, as we have ever seen in harness; and success say we to the Vermont enterprise, of rearing and maintaining a new and highly creditable family of horses."

"Peach Leather," and "Pumpkin Pap."

Elizabeth Diehl, Bristolville, Ohio, sends us the following recipes:

Peach Leather.—Take good ripe peaches—pare and cut them in two. Then with a case knife, spread them on a clean smooth board, which should first be rubbed with butter to prevent the fruit from adhering. They should be dried in the sun or a dry-house. Then with your knife, pare them off the board and roll them into rolls for eating in the winter. In this way they may be kept from one generation to another.

Pumpkin Pap.—I take a good ripe pumpkin, cut it into strips about an inch thick—cut off the rind, pare out the inside, and cut up in pieces about an inch square. Then, after having them washed in clean water, I throw them into my dinner pot with water enough to pass over them, and boil till done. Then I take them off the fire and mash them fine,—put in a good sized table spoonful of salt to a common sized pumpkin; and mix up a large tea-cup full of wheat flour with sweet milk enough to reduce it to the consistency of thick cream. Then I stir it in with the pumpkin, hang it over the fire, and let it simmer about 15 or 20 minutes. While it is thus boiling, I fry a small handful of crumbs of bread, with a lump of butter about the size of a hen's egg, till brown. I then stir it in with the pumpkins, and it is ready to be served on the table.

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Cultivating Fruit Trees.—The Prairie Farmer in speaking of the injury to young orchards occasioned by the common practice of sowing them to grain and seeding to grass, makes this fair comparison: "Small grains in the orchard, are worse than red pepper in lemonade. So we think." He might have added that they are about as nourishing to fruit trees, as ten-penny nails would be to a horse, or a Scotch-snuff pudding to young children.

Agricultural Societies.

New-York State.—It should be remembered that the annual meeting, for the election of officers, &c., is to be held at the Capitol on Wednesday the 21st of this month. At the same time there will be an exhibition of Fruits at the Society's Rooms, and an exhibition of grain and fat cattle, sheep, swine, poultry, &c., at Gallup's Hotel, Washington street.

Niagara.—We are indebted to A. Robinson, President of the Society, for the Report of its doings the past year, from which we infer that it is in a flourishing condition. The officers elect, for 1852, are Morgan Johnson, Pres't.—Moses C. Crawsey, Lockport, and J. W. Babcock, Somerset, V. Pres'ts.—B. F. Wilson, Wilson, Sec'y.—John Onderdonk, Wilson, Treasurer.

Muskingham Co., O.—We have received the annual Report of this Society for 1851, from J. L. Cox, Esq., Zanesville. Their exhibition in October, appears to have been very successful. The following officers were elected for the current year:—Cornelius Springer, Pres't.—J. Dillon, V. Pres't.—Jas. L. Cox, Treas., and John Barnard, Sec'y. We believe these officers reside at Zanesville.

ANSWERS TO INQUIRIES.

Disease in Calves.—C. E. H., Monroe, Ct. We cannot say, from your description, what is the disease with which your calves are attacked. The stiffness of the hind legs may be caused by constipation of the bowels. A strict observance of the animal would determine whether the affection rose from this cause, and if it did, give castor oil or salts till a copious discharge is produced. But the stiffness may be simply rheumatism. In this case give the animal, instantly, warm shelter, and warm gruel seasoned highly with ginger. Rub the loins with some stimulating liniment—as a mixture of alcohol, spirits of turpentine and laudanum.

Seed-planters.—A. B., Bucks county, Pa. "Can any one machine be had which will answer for planting all kinds of seeds, from carrots and onions, to beans and corn? Will any one plant corn in rows both ways?" Emery's seed-planter is provided with apparatus by which the small seeds you mention may be deposited in the desired quantity, and at the proper intervals, and by the necessary variation will drop the larger seeds with equal exatness—the change of gear admitting the seed to be dropped at spaces of four inches to four feet. There is no drill and can be none, which can be depended on to plant in rows both ways. Even if each row were commenced precisely on the same line, and the seed was dropped at exactly the distance, the inequalities in the surface of the ground, would prevent the hills being in regular squares.

Phosphate of Lime.—R. S., New-York. "What have been the results from the use of phosphate of lime in this country?" We have known but few trials of this substance, and those were not conducted in such a way as to teach reliable inferences. It would be useful to the public to learn the results of any trials which have been made with phosphate of lime, in any form. It is the rock phosphate that is referred to—not bones—but it is desirable to learn their comparative effects.

Potatoes from Seed.—M. L., Hartford, Ct. "Have potatoes raised from seed shown any superiority in escaping the rot, or disease?" There is no evidence that potatoes raised from seed have in general escaped the rot better than others. Some varieties have always been more hardy than others, and have been more exempt from disease. The advantage of raising from seed is, that varieties are multiplied, and by trying them, the hardiest and best may be selected for general propagation. A great proportion of those lately produced from seed, have shown as strong a tendency to disease as the old varieties; a few appear to have less of that tendency, but not *because* they were raised from seed, and, besides, they require to be further tried before their constitution can be fully pronounced on.

NEW PUBLICATIONS.

Report of the Commissioner of Patents for the Year 1850: Part II. Agriculture. This volume comprises near 600 pages of matter in reference to the agricultural products of this country, and the means of improving and increasing them. It contains several elaborate and able articles, besides many brief communications of interest and value. Among the former we notice a paper on "The Study of Soils," by Dr. Lee, and one on "Fruit Culture," by J. J. Thomas. The volume also contains much statistical information in regard to crops, fisheries, manufactures, foreign and domestic commerce, &c. We are sorry to see that the same objections which have heretofore been made in reference to the mechanical execution of the work, the quality of the paper, and the arrangement of the matter, apply to this volume. They are objections for which no sufficient excuse can be given.

The December No. of Harper's Magazine has the portrait and political history of Kossuth—a name that is on the lips of every one, and whose cause is exciting a deep sympathy in every heart that desires freedom for itself and the oppressed. The impartial record of news, both American and Foreign, marks this admirable periodical, and its style of execution commends it to the favorable notice of those who wish to adorn their tables as well as inform their minds.

The International for December contains a rare collection of historical and biograhical information. Among the most instructive articles are Nauvoo and Deseret, an account of the Mormon impostor; Windsor Castle and its associations, and Calcutta, social, industrial, and political. The portrait and brief notice of the life of William Cullen Bryant, adds another to the valuable list of American authors that has embellished and contributed to the popularity of former numbers.

The American Veterinary Journal.—We have received several numbers of a monthly publication with this title, edited by Geo. H. Dadd, M. D., Boston. Dr. D. is well known to the public as author of several valuable works on the treatment of the diseases of domestic animals, and enjoys a high reputation as a veterinary surgeon. The Journal will be the medium of disseminating much useful information. Terms, one dollar a year in advance.

NOTES FOR THE MONTH.

In entering upon the new year, we most cordially tender the compliments of the season to all our readers and friends. We congratulate them upon the rich blessings of the year that is past, as well as upon the fair prospects which the new year opens before them. At no time has the profession of Agriculture held so high a rank in the public estimation, as now; and for the reason that farmers are every year becoming more intelligent and consequently more respected and powerful. We wish we could infuse into the mind of every working farmer, a just view of his responsibilities, and the dignity of his calling. Too many farmers, as well as their wives, forget the true respectability and independence of their pursuit, and instead of seeking to make their rural homes the seat of refinement and happiness, seem to consider every other sphere of life, more desirable than their own. This should not be so, and would not, if parents would train up their sons and daughters for farmers and farmers' wives, instead of impressing them with the idea that the labors of the husbandman and his family are only proper to the ox and the blockhead. A change, in this respect, is slowly moving onward, and we think we see a brighter day dawning—a day when our farmers, having become wiser and better men, shall teach their children both by precept and example, that there is no home capable of higher refinement and purer enjoyment than that of the American farmer. Education and intelligence,—a conviction that knowledge, in agriculture as in everything else, is power,—will effect the desired reform. Other professions, though few in numbers comparatively, have, and do now in a great measure wield the political and social power of this country. And why? Simply because they are educated for their calling. Not so with the farmer. Time was when it was not supposed that MIND was necessary to him. All he had to do, was to "dig and delve." But the truth is beginning to be felt, that agriculture affords as large and useful a scope for talent as any industrial pursuit, and that all that is necessary to elevate the rural population, and give to them the power which, from their numbers, they should possess, is to give them the same advantages of education which are bestowed upon those destined to the professions. Let farmers, instead of sending their sons to the shop or the office, educate them for the farm, and we shall not much longer hear complaints that the lawyers and doctors possess all the influence in our social and political circles. Improve the mind of the farmer—give him the power to express his thoughts, and we have no fears but what he will take his true position in society.

To effect this object,—to improve the mind, to elevate the character, and refine the taste of our rural population, is one of the prominent aims of The Cultivator. It will avail but little if we show the farmer how to increase his profits, if there is not a corresponding elevation of the aims and purposes of his life—if he does not seek, while his profits are enlarged, to increase the facilities for the mental improvement of his family, and to cast around his homestead those adornments which are, happily, within the reach of all our farmers, and which serve in so high a degree to strengthen the attachment of both parents and children to their homes. The winter evenings are the time to think of these things,—the time to read, reflect, and to devise plans to be carried into effect, when "the time of the singing of birds" shall again come round; and if the pages of the Cultivator shall be instrumental in inducing the formation of such plans as will lead to a more just appreciation of the advantages of their position,—to higher intellectual enjoyment, as well as to more satisfaction and profit in their labors, we shall have accomplished a most laudable object.

Acknowledgments.—Letters from correspondents have been received during the past month, from D. J. Beardsley, John Diehl, Elizabeth Diehl, Charles F. Morton, Hon. F. Holbrook, Geo. Jaques, Dr. G. B. Smith, W. G. Edmundson, L. Durand, S. B. Bulkeley, Prof. J. P. Norton, E. Vail, J. Wilkinson.

Books, Pamphlets, &c., have been received as follows:—The American Muck Book, by D. J. Browne, and the Ladies' Guide, or Skillful House-wife, by Mrs. L. G. Abell, from the publisher, C. M. Saxton, New-York.——Illustrated Agriculturist's Almanac, for 1852, from J. G. Reed, publisher, New-York.——Saxton's American Farmer's Almanac for 1852, from C. M. Saxton, New-York.

Pressing Hay.—A correspondent solicits information on the best mode of pressing hay—the expense of the press, the weight of the bales, the article used for securing the bales, &c. &c. Will some one describe the most improved mode?

Stall Feeding.—A correspondent in Maryland, E. L., says—"I have been much pleased with the remarks of your correspondent, J. Johnston, on stall-feeding cattle, and would be glad if he would give some farther particulars, as to kind and quantity of feed, size of stalls, and whether he halters his cattle, or has gates between tween them. I sometimes do a little at this business, and would like do more as my land improves, if I could make it pay at the price of grain generally in this vicinity." Will our friend Johnston furnish the information asked for?

The Stone-Hill Potato.—In our November number, p. 379, we acknowledged the receipt of a fine sample of potato, to which the originator had given this name. We have since received a barrel of them from Mr. Bulkeley, who gives us the following history of them. In the spring of 1847, he planted a quantity of seed, saved from the Carter potatoe. The product was a great variety of sorts and colors. Several of the most promising of these he planted in 1848. From these he selected three white varieties, so near alike as scarcely to be distinguished from each other, and planted them promiscuously. These he has continued to plant, the potatoes increasing in size each year. Some of them the past season, weighed over 2 lbs. They are hardy strong growers, productive, and of excellent quality—though not as early as the June, are much earlier than the Carter, and will crack open when boiled even before they are ripe, and retain their fine quality through the year. If they shall prove equal to this representation, hereafter, they will be a very valuable acquisition to our varieties of the potato. Mr. B. has some of them for sale—price $2.50 per barrel, delivered at the depot. Address D. A. Bulkeley, Williamstown, Mass.

Ayrshire Cattle.—Mr. J. C. Tiffany, of Coxsackie, has lately purchased of E. P. Prentice, Esq., of Mount Hope, an Ayrshire cow, two yearling heifers, and a bull calf. They are all animals of superior excellence, and with the other stock of this breed which Mr. Tiffany has in his possession, will form a good breeding herd.

Mr. Prentice procured from Massachusetts, in November, some valuable Ayrshires; viz, from Mr. Benj. Shurtleff, of Chelsea, five cows, two yearling heifers, and a heifer calf, and from Mr. Peter Lawson, of Dracut, a yearling heifer and heifer calf. Those from Mr. Shurtleff were of the stock formerly owned by Capt. Randall, of New-Bedford, and one cow and several of her progeny, imported by Mr. S. Those from Mr. Lawson were from cows imported by him, the cows being in calf when imported. They are all good animals—some of them quite extra in points compared with the general standard for this valuable breed.

Address before the Penobscot Hort. Society.—This address, delivered by Col. Henry Little, of Bangor, shows much practical acquaintance with horticulture, and abounds with suggestions, which, if rightly heeded, must prove largely beneficial to those for whom they were intended. The state of Maine has much land that is well adapted to the production of apples, and it is well known that winter apples from that section are not surpassed in value by those of any part of the country, on account of their quality of long keeping. It is a subject of surprise, that the advantages of this state, in reference to this article, have not been more fully improved. Her "mission" is, clearly, the production of winter apples on a large scale, for exportation to other places less favored by nature for a profitable trade in this fruit. The truth is, it has been the custom—and the citizens of Maine, are in common with others, chargeable with the fault—to underrate the value of that region in respect to its agricultural and horticultural capabilities. It is gratifying to witness such effectual efforts as this of Col. Little's, to check this suicidal current of opinion. If the population of Maine will only direct their energies to the proper improvement of the resources of their own state, instead of carrying their capital to the "far west," they will find no cause to complain that they are not well rewarded.

Death of S. W. Cole, Esq.—We regret to learn that this gentleman,—long connected with the agricultural press, late editor of the *New-England Farmer*, author of a treatise on fruit trees, and another on the diseases of domestic animals,—died at his residence in Chelsea, Mass., on the 3d of December last. He had suffered long from a painful illness.

Subsoil Plowing.—The condition of the ground, as to moisture, greatly affects the results of this operation. If the subsoil is tenacious, it should be in so dry a state when the implement passess through it, that it will be pulverised, and left in a loose state; if it is worked when wet, the effect is only to pack the earth more closely together. The various opinions in regard to the utility of subsoil plowing, have arisen in a great measure from these circumstances. It should be remembered, moreover, that on tenacious soils, thorough drainage is essential to the development of the advantages of subsoiling.

Nature of Serpents.—A Boa Constrictor, in the Zoological Gardens at London, swallowed a woolen blanket on the 3d of October last, and disgorged it on the 8th of November. It was supposed by the keeper that the serpent wanted food, and a couple of rabbits were therefore put into his cage, but he swallowed the blanket instead of the rabbits.

Wire-worms.—In the *Working Farmer* for October, Prof. Mapes refers again to the subject of killing wire-worms with salt, and in reference to the experiment spoken of by us, sometime since, in which salt, at the rate of 40 bushels to the acre had no effect on the worms, he says—"If so the wire-worms are not so well behaved as with us, for the slightest application of salt kills them at once." The *New-England Farmer* of Oct. 25th, has an article which shows that the wire-worms of New-Hampshire are no better "behaved" than those on which we experimented. The writer says—"He has tried various experiments, such as putting a small quantity of salt in the hill and sowing it upon the surface, but without effect. Finally, he made a brine as strong as it could be made, and placed several wire worms in it, and let them remain three or four hours. Upon examination, they were found not only alive, but in excellent spirits. and not at all affected by the *pickle* they had been in."

Market Gardening about London.—J. Cuthill states in Hovey's Magazine, that the number of acres under cultivation to supply the various London Markets, is about 12,000 acres occupied by vegetables, and about 5,000 by fruit trees. Some 35,000 people are employed in their cultivation. Besides these, occasional supplies and sent by the more distant counties; and hundreds of acres in Cornwall and Devonshire are employed in growing early potatoes, broccoli, peas, &c. which reach London by rail.

A Domestic Picture.

The following lines, written by C. G. Eastman, editor of the Vermont Patriot, are "full of nature, truth, and tenderness:"

The Farmer sat in his easy chair,
  Smoking his pipe of clay,
While his hale old wife, with busy care,
  Was clearing the dinner away.
A sweet little girl, with fine blue eyes,
On her grandfather's knee was catching flies.

The old man laid his hand on her head,
  With a tear on his wrinkled face;
He thought how often her mother dead
  Had sat in the self-same place.
As the tear stole down from his half shut eye,
"Don't smoke," said the child, "how it makes you cry."

The house dog lay stretched out on the floor,
  Where the shade after noon used to steal,
And the busy old wife, by the open door,
  Was turning the spinning-wheel;
And the old brass clock on the mantle-tree,
Had plodded along to almost three.

Still the Farmer sat on his easy chair,
  While close to his heaving breast,
The moistened brow and the cheek so fair
  Of his sweet grandchild was pressed;
His head bent down on her soft hair lay,
Fast asleep were they both that summer day.

BUSINESS NOTICES.

To our Subscribers.

With this number we send you, agreeably to our promise, a copy of

The Pictorial Cultivator Almanac,

which has been got up at a heavy expense, expressly as a NEW YEAR'S PRESENT, to the subscribers of THE CULTIVATOR. If, in return, all who receive this number will use their influence to increase the list of our subscribers for the present year, they will confer a favor for which they will receive our hearty thanks.

◆

Every Subscriber an Agent.

All our Subscribers, as well as all Postmasters, are especially invited to act as Agents for our publications, THE CULTIVATOR and THE HORTICULTURIST.

☞ Agents who compete for our Premiums, will aid us in keeping their accounts, if they will number their subscribers, 1, 2, 3, and upwards.

◆

Remember the Terms to Clubs.

Seven Copies for $5.00—Fifteen Copies, and the Horticulturist, six months, to the Agent, for $10.00.

☞ In answer to several inquiries, we would state, that it is not required that all papers in a club should be sent to one post office We will address them to as many different offices as may be necessary.

◆

Premiums to Agents of the Cultivator.

As an inducement to those disposed to act as Agents, the following *Premiums* will be paid in CASH, SILVER PLATE, or AGRICULTURAL BOOKS and IMPLEMENTS, to those who send us the largest list of subscribers for THE CULTIVATOR for 1852, previous to the *tenth of April next.*

1. To the one sending us the largest number, with the pay in advance, at the club price of sixty-seven cents each, the sum of FIFTY DOLLARS.
2. To the one sending us the next largest list, the sum of FORTY DOLLARS.
3. To the one sending us the next largest list, the sum of THIRTY-FIVE DOLLARS.
4. For the next largest list, the sum of THIRTY DOLLARS.
5. For the next largest list, the sum of TWENTY-FIVE DOLLARS.
6. For the next largest list, TWENTY DOLLARS.
7. For the next largest list, FIFTEEN DOLLARS.
8. For the next largest list, TEN DOLLARS.
9. For the next largest list, FIVE DOLLARS.
10 To all who send us Thirty Subscribers or over, and do not receive one of the above Prizes, a copy of THE HORTICULTURIST for one year.
11. To all who send us Fifteen Subscribers, and do not receive one of the above Premiums, THE HORTICULTURIST for six months.

◆

Postage of the Cultivator.

We have been surprised to learn, by letters from different correspondents during the past month, that some Postmasters have charged three or four times as much as the legal postage on The Cultivator. We have heretofore published the decisions of several Postmaster Generals, that the Cultivator was subject to *newspaper* postage only. We now give another decision to the same effect.

POST-OFFICE DEPARTMENT,
Appointment Office, *Nov.* 24, 1851.

SIR—I have received your letter of the 20th inst. The "Cultivator" is considered as being under the classification of a "newspaper," as that term is defined by the 16th section of the act of 3d March, 1845; and it therefore is entitled to all the benefits granted to, and subject to all the restrictions imposed by law on such publications.

Respectfully yours, S. D. JACOBS.
1st Assist. P. M. Genl.

The postage on the Cultivator is therefore as follows:

For any distance not exceeding 50 miles,	5 cents	*per year.*
Over 50, and not exceeding 300 miles,	10 cents	*per year.*
Over 300 " 1,000 miles,	15	" "
Over 1,000 " 2,000 miles,	20	" "
Over 2,000 " 4,000 miles,	25	" "
Over 4,000,	30	" "

To prevent any misapprehension we quote the 16th section of the law of 3d March, 1815, referred to in the above letter. It is as follows:

SEC. 16. And be it further enacted, that the term "Newspaper," hereinbefore used, shall be, and the same is hereby defined to be, any printed publication, issued in numbers, consisting of not more than two sheets, and published at short stated intervals of not more than one month, conveying intelligence of passing events, and *bona fide extras and supplements* of such publication."

By this extract it will be seen that the *Pictorial Cultivator Almanac* is entitled to go to our subscribers as a supplement to The Cultivator, it being a "*bona fide supplement*" to it, and nothing else. The Almanac is not published for sale, and is sent only to subscribers to the Cultivator.

Albany Prices Current.

ALBANY, Monday, Dec. 15, 1851.

The State canals have closed for the season. So suddenly was navigation suspended that a large amount of produce of all descriptions, but principally of flour, wheat and barley, is frozen in between Little Falls and Schenectady. The condition of the markets at New-York for flour and wheat is such as to require at that point more than an ordinary supply to prevent high prices. Our latest advices from New-York represent the market there for breadstuffs as laboring under much excitement, influenced by the early closing of the canal, the admitted light stock of flour (not exceeding 400,000 brls.,) and of wheat (not exceeding 170,000 bushels domestic,) the favorable advices from abroad and the good condition of the home markets. We cannot place the matter in a better light before our readers than the following quotations of the New-York market show:

	Nov. 28.	Dec. 12.
State, common brands,	3.87a94	4.37a
State, straight do	3.94a$4	4.37a4.44
State, favorite do	4.a$4.12	4.44a4.50
Mich., In., and Ohio, mixed,	4a406	4.44a
Michigan, fancy,	4.12a4.18	4.50a
Genesee, fancy,	4.25a4.50	4.62a4.75
Genesee, extra,	4.62a5.62	4.87a5.75
Canada, in bond,	4a4.12	4.18a4.25

The greater advance in the low grades is owing to that description being in lighter supply than the better descriptions. In regard to the European markets we have already advices of the closing of the Baltic, an early period, and the conceded fact by the English commercial press that from the Black Sea and America alone, can any supply be expected.

FLOUR.—The market here has fallen off to the demand for the home trade and eastern railway, to be somewhat increased this winter by the demand from the river towns on the line of the Hudson R. R. Qoutations are $4.25 for State, 4.25a4.37½ for Michigan, Indiana and Ohio, 4.50a4.62½ for fancy Genesee, $5 for extra Ohio and 4.75a5.37½ for extra Genesee.

GRAIN.—The stock of wheat here is light, and sales of Genesee are slowly made at 98a100c. for good to prime lots. At New-York, wheat has partaken of the upward tendency of flour, Genesee being held at 100a105c. The sales of Rye are confined to street transactions at 62½c. Oats in the street at 33a34c. Corn continues in demand for the East with sales 25,000 to 30,000 bushels at 59a60c. taken at the load. Barley, since the close of the Canal, is held firm and may be quoted at 77a80c.; the sales are limited. The stock here in store is estimated at 50,000 to 60,000 bushels.

PROVISIONS.—The transactions in barrelled meats include 150 bls. new mess pork at $15. A sale of 50 bls. beef Hams was made at $14.

In cut meats the sales are 107 brls. hams and 93 do. shoulders, Chicago packed, pt. The retail quotations are $14 for new prime pork, $15 for do. mess and $16 for do. clear. Mess beef 9.50a$10. Beef hams 14a14.50. New smoked hams 10c. shoulders 8c. Lard 9a9½c. Butter 12a17c. for State dairies and Cheese 6a6½c. Dressed hogs have fallen off at the close; the sales of the week aggregate 3000 head, closing at $5⅜ for still fed and 6a6.12½ for fair to good lots.

WOOL.—Is in better demand at improving rates; a sale of 21,000 lbs. Michigan fleece was made on the 5th at 39½c.

During this week sales of 30,000 lbs. at 37½c. for mixed Michigan, 40c for common Ohio and the balance p.t.

At New-York the Reporter says the inquiry is light; sales of fleece during the week of 10,000 lbs. full blood Saxony at 42½c.; 4,000 lbs. do. do. at 47½c ; 2,000 lbs. ¾ blood at 40c.; 5,000 lbs. common at 37½c.; 8,000 lbs. do. on private terms. In pulled the transactions have been limited. We quote sails of 7,000 lbs. and (country) at 37½c., 3,000 No. 1 do. at 32c. Report says sheep have advanced 100 per cent in Ohio, and that few will be slaughtered. This confirms our remarks in a previous number, and must cause a scarcity of pulled wools for the year and an increase in the clip of next year. In foreign wools the demand is small, and confined entirely to operations between small manufacturers and dealers. Under these circumstances stocks show no diminution. At Philadelphia there is a good demand from manufacturers, and a very firm market for this article. Further sales to the extent of 60a70,000 lbs. are reported, in lots, at 31a32c. for pulled, and 35a50c. for fleece, all on the usual terms.

Field and Garden Seeds.

WE have recently imported, from England, France, and Germany, and have grown in the United States expressly for us, a fine assortment of the best and most approved kinds of FIELD and GARDEN SEEDS.

Agricultural and Horticultural Implements, a large assortment of the various kinds suitable for North and South America.

A. B. ALLEN & CO.,
Jan. 1, 1852—tf. 189 and 191 Water-st., New-York.

North American Sylva.

THE PUBLISHER would respectfully call attention to the following announcement of the most complete and beautiful work on American Trees now published. It is of great value to Libraries, residents in the country, botanists, nurserymen, and those who take an interest in the cultivation of trees.

Subscribers will please designate whether they wish the whole work, or Nuttall's Supplement separately.

Subscriptions received by the Publisher, and the principal Booksellers of the United States.

The North American Sylva; or a description of the Forest Trees of the United States, Canada, and Nova Scotia, considered particularly with respect to their use in the arts and their introduction into commerce; with a description of the most useful of the European Forest Trees. Illustrated by 156 finely colored copperplate engravings, by Redoute, &c. In three volumes. Translated from the French of

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MEMBER OF THE AMERICAN PHILOSOPHICAL SOCIETY, ETC. ETC.,

With notes by J. Jay Smith, member of the Academy of Natural Sciences, &c. This work is of the highest standard value, with or without the Supplementary volumes by Nuttall.

A new and splendid edition of this work, of the trees most commonly known has just been issued in Royal 8vo., colored in a style equal to the best French editions. It is completed in three handsomely bound volumes, gilt edged and stamped, for twenty-four dollars. Uncolored copies sixteen dollars.

ROBERT P. SMITH, Publisher.

*** Specimens will be forwarded on application post-paid.

THE NORTH AMERICAN SYLVA, or a description of the Forest Trees of the United States, Canada and Nova Scotia. Not described in the work of F. Andrew Michaux, containing all the Forest Trees discovered in the Rocky Mountains, the territory of Oregon, down the shores of the Pacific, and into the confines of California, as well as in various parts of the United States. Illustrated by 121 finely colored plates, in three volumes, Royal octavo. By

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The persons who possess the former edition of Michaux's work can procure the three additional volumes by T. NUTTALL separately, and thus complete their copies.

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Jan. 1, 1852—1t. 15 Minor street, Philadelphia.

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THE AMERICAN MUCK BOOK,

A complete Manual of Manures. Price $1.

C. M. SAXTON, agricultural book publisher, has just published—the American Muck Book—treating of the Nature, Properties, Sources, History and Operations of all the principal Fertilizers and Manures in common use, with specific directions for their preparation, preservation and application to the soil and to crops, as combined with the leading principles of practical and scientific Agriculture, drawn from authentic sources, actual experience, and personal observation. Illustrated with engravings. By

D. J. BROWNE.

Author of Sylva Americana, a Treatise on Forest Trees, American Poultry Yard, &c.

C. M. SAXTON,
Agricultural Bookstore, 152 Fulton street, New-York.

The following is from Dr. C. T. Jackson, of Boston, the best Agricultural Chemist in the U. S.:—

[COPY.]

BOSTON, November 6th, 1851.

Dear Sir: I have the pleasure of acknowledging the receipt of a copy of the "American Muck Book," recently published by you, and edited by Mr. D. Jay Browne.

From an attentive examination of this book, I have come to the conclusion that it is one of the best works extant, on the principles of scientific agriculture, and the best compendium of our most recent knowledge of the nature of manures and their adaptation to particular soils and crops. It cannot be expected that a single volume could possibly contain the whole sum of chemical knowledge applicable to the science of chemistry; but on looking over the closely printed and compact tables of analyses, and the abundant formulas, which this publication contains, I could not fail to be surprised at the industry manifested in preparing it. I was also gratified to find it so well adapted to the American system of husbandry, and so practical in its character. Its copious and accurate index adds not a little to its value.

I shall certainly recommend it to my agricultural friends as a very useful book, and one necessary to every scientific farmer. I am, very respectfully, your ob't. servant,

CHARLES T. JACKSON, State Assayist, &c. &c.
To C. M. SAXTON, Esq., New-York. Jan. 1, 1852.—3t

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THE undersigned has been appointed Sole Agent for the Sale of McCormick's Reapers and Mowing Machines in the city of New-York. Farmers and others in want, will please send in their orders at an early date, that they may be supplied in due time.

A LONGETT, at the
Jan. 1—1t. State Agricultural Ware House, 25 Cliff street, N. Y.

A Book for Wives and Daughters.

THE LADIES GUIDE; OR SKILLFUL HOUSEWIFE, (*price twenty-five cents*,) being a Complete Guide to Domestic Cookery, Taste, Comfort and *Economy*; embracing *six hundred and fifty-nine* Receipts, pertaining to household duties, Gardening, Flowers, Birds, Plants, &c. Published by

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VERY handsome specimens of the Albany Dorking, Black Poland, and Silver Spangled Poland, are for sale by

Albany, Jan. 1, 1852—2t. E. E. PLATT.

THE HORTICULTURIST,

AND

JOURNAL OF RURAL ART AND RURAL TASTE,

EDITED BY A. J DOWNING, NEWBURGH,

Author of Landscape Gardening, Fruits and Fruit Trees of America, Cottage Residences, Country Houses, &c., &c.,

Is published monthly, at the office of The Cultivator, Albany, by LUTHER TUCKER, Proprietor.

THIS popular publication, which is gradually extending its influence throughout the country, and is becoming indispensible to the tasteful Gardener, the Fruit Culturist and the Floriculturist, will be continued as heretofore, under the Editorship of Mr. DOWNING, whose ability and taste in all matters of country life, are unequalled by any writer of the present day.

The extended and valuable correspendence of THE HORTICULTURIST, presents the experience of the most intelligent cultivators in America; and the instructive and agreeable articles from the pen of the Editor, make it equally sought after by even the general reader, interested in country life. To all persons alive to the improvement of their Gardens, Orchards, or Country Seats—to Scientific and practical Cultivators of the Soil—to Nurserymen and Commercial Gardeners, this Journal, giving the latest discoveries and improvements, experiments and acquisitions in Horticulture, and those branches of knowledge connected with it, will be found invaluable.

A NEW VOLUME (the 7th,) commences with the January number for 1852; and it will be the constant aim of the Editor and the Publisher, by every means in their power, to render it still more worthy, by every practicable improvement, of the liberal patronage it is receiving.

☞ All letters on business must be addressed to the Proprietor LUTHER TUCKER, Albany, N. Y., and Editorial correspondence to be addressed to the Editor, A. J. DOWNING, Esq., Newburgh, N. Y.

TERMS.—Each number contains 48 pages, embellished with a Frontispiece and numerous Illustrations, printed on the finest paper, and in the best manner. Price, $3 a year—Two copies for $5.

TO FARMERS.---POUDRETTE.

THE LODI MANUFACTURING COMPANY having enlarged their works, are prepared now to receive and fill orders for Poudrette with dispatch, and in all cases with a *freshly manufactured article*, at their usual prices, $1,50 per barrel for any quantity over six barrels, 3 barrels for $5.—$2 for a single barrel, delivered free of cartage on board of vessel or elsewhere, in the city of New-York.

The Company refer to their pamphlet (furnished gratis) for hundreds of certificates as to the efficacy, cheapness, and superiority in all respects of their Poudrette over any other known manure for raising a crop of corn—also to A. J. Downing, Esq., B. M. Watson, Esq., Hon. J. P. Cushing, J. M. Thorburn & Co., and many others as to excellency as a manure for flowers and trees, and the following from Hon. Daniel Webster, Secretary of State:

WASHINGTON, March 19, 1850.

"If I neglect the annual purchase of some af this article, my gardenerer is sure to remind me of it. He thinks it almost indispensable, within his garden fence; but there are uses, outside the garden, for which it is highly valuable, and cheaper, I think, than any other manure at your prices. A principal one, is the enrichment of lawns and pleasure grounds, in grass, where the object is to produce a fresh and vigorous growth in the Spring. Our practice is to apply it, when we go to town in the Autumn, and we have never failed to see its effects in the Spring."

All communications addressed to the "LODI MANUFACTURING COMPANY, 74 Cortlandt street, New-York," will meet with prompt attention. Jan. 1, 1852—6t.

United States Agricultural Warehouse and Seed Store.

THE subscribers solicit the attention of the public to the large and varied assortment of Agricultural and Horticultural Implements, Field, and Garden Seeds, which they have constantly on hand, and offer for sale at the lowest prices, and on the best terms. Persons in want of any articles in their line, would do well to call upon them before purchasing elsewhere. A descriptive Catalogue will be sent gratis upon application, post-paid.

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JOHN MAYHER & CO.
Dec. 1—tf. No. 197 Water-St., New-York.

Spanish and Shanghae Fowls.

THE subscriber has for sale fowls of these celebrated breeds. The Spanish are from three to seven months old, and the oldest of the pullets have laid regularly for two months. Both cocks and hens are of a glossy black color, with the large single comb, and white ear-patch which distinguish this race. No fowls, probably, combine in so great a degree as these, the advantages of fine quality of flesh and abundant production of eggs, with great beauty of form and plumage. The Shanghaes comprise both the red or yellow, and the white. The latter have bred this year entirely uniform in color—no variation from pure white having appeared in several broods.

N. B. In a previous advertisement it was stated that the Spanish fowls would be exhibited at the State Fair at Rochester. They were *not* shown there—an accident preventing them from being sent.

Albany, Dec. 1—tf. J. M. LOVETT.

FOWLS AND EGGS.

THE great desire manifested in New-England for procuring good Poultry, has induced H. B. COFFIN, *Newton, Mass.*, to pay particular attention to breeding and importing first rate stock. All persons desirous of having the purest and best to breed from, may depend upon being faithfully served. Among many kinds of Fowls for sale by him, are the following, which he is very particular in breeding.

Shanghae—Forbes stock.
Imperial Chinese—Marsh stock.
Cochin China—Coffin do
White Shanghae do do
Black Shanghae do do
Golden Poland, or Spangled Hamburgh.

Dealers in Fowls or Eggs for hatching, supplied upon liberal terms. Orders addressed to *No. 5 Congress Square, Boston*, will be promptly executed.

Reference to Mr. J. VAN DUSEN, of Cincinnati, Ohio, who will take orders for Fowls, as advertised above.

Boston, Aug. 1, 1851—12t.

Splendid Farm in Ohio for Sale or Rent.

WE have a splendid farm for sale or rent, containing about 300 acres. It is situated 21½ miles west of Columbus, and within 2½ miles of London, the county seat of Madison county. An excellent McAdamized road, from Columbus to Xenia, passes through it. The access to market either east or south, is easy and quick. The railroad from Cincinnati to Cleveland has a depot at London, 2½ miles from it.

About 125 acres of the land are cleared and under good improvement. The balance is well timbered, and the whole is under fence. It is well watered, having springs or streams in abundance.

On it is a substantial brick dwelling house and two other comfortable tenements. The orchard contains about 200 apple, peach and pear trees. The whole farm is well adapted for raising grain, or corn, and would make an admirable dairy or stock farm.

The proprietor has made arrangements in the west to go into another kind of business, and will sell the above farm on reasonable terms. If not sold by winter the above farm will be rented for a series of years.

For terms apply at this office or to

WOMBAUGH & WHEELER,
Oct. 1—4t. Real Estate Agents, Columbus, O.

A Choice Farm in Ohio for Sale,

LOCATED in Stark county, three and a half miles south of Massillon, containing three hundred and three acres about two hundred and twenty-five acres cleared, and in a high state of cultivation. The balance in timber, principally white oak.

The improvements consist of a frame tenant house and barn, a Gothic Cottage, built of stone, beautifully located, commanding a view of the whole estate; a thrifty young orchard of choice apple trees, &c.

The cleared land is a level plain, soil of a superior quality for the production of wheat, free from stumps, and all obstructions to a good system of cultivation. The timber land is what is termed rolling, and elevated about thirty feet above the plain. The Erie and Ohio canal pass through the farm, forming the western boundary, and the Pennsylvania and Ohio Railroad within three miles. In short, it is one of the most desirable estates in Ohio.

The owner being permanently located in a foreign country, is the reason for the farm being offered for sale.

For further particulars direct, post-paid, to the address of the subscriber, C. NESENER, Massillon. Ohio. Oct. 1—4t.

Colman's European Agriculture.

EUROPEAN AGRICULTURE, from personal observation, by HENRY COLMAN, of Massachusetts. Two large octavo vols. Price, when neatly bound, the same as published in Nos., $5. For sale at the office of THE CULTIVATOR.

New and Important Insurance.

Northern N. York Live Stock Ins. Co., Plattsburgh N. Y.

INCORPORATED by the Legislature of the State of New-York, July, 1851. Horses, Cattle, and all kinds of Live Stock insured against Death, by the combined risks of Fire, Water, Accidents, Diseases, &c. CAPITAL, $50,000.

DIRECTORS.

James Farr,	Washington county.	Amasa C. Moore,	Clinton county.
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A. C. MOORE, Vice-Pest. Z. C. PLATT, do Treas.
I. C. MIX, Port Ann, Gen. Agent.

October 13, 1851.

This company are now organized and ready to receive applications for insurance. It is confidently believed that the owners of valuable animals will avail themselves of the advantages offered by this mode of protection. If fire, life and marine insurances are proper and expedient, so is live stock insurance: the reasons for insurance are equally applicable to all.

The company have adopted such rates as, they believe, will furnish the means of paying ordinary losses, without resort to an assessment. But to guard against extraordinary losses, which may arise from contagious diseases or epidemics, it becomes necessary to require premium notes.

To the Owners of Horses and Live stock.

Office of the Northern New-York Live Stock Ins. Co.,
PLATTSBURGH, August 16, 1851.

The Directors of the above Company, incorporated by the Legislature of the State of New-York, at its extra session in July, 1851, respectfully request your attention to the following facts bearing on this subject.

1st. Value of this class of property. By the census of 1845, there were at that time in the State of New-York, as follows:

Horses,
One-half a million, ... 505,155
Neat Cattle,
Over two millions, ... 2,072,330
Cows milked,
Nearly a million, ... 999,490
Sheep,
Over six millions, ... 6,443,855
Hogs,
Over one million and a half, ... 1,584,344

Without making any estimate of the value of this property, it is apparent that it is immense; extending to every inhabited spot, and essential to the health and comfort, almost to the existence of the inhabitants

2d. These animals are subject to disease and accident. It is asserted by a Vermont Company, engaged in the Live Stock Insurance, as a fact which cannot be disputed, that the aggregate loss upon this species of property throughout New-England, is *greater* than the losses by fire; at all events, it is a fact undoubted that the annual loss is very great, and the owner is left unprovided with any means of security against the hazard incident to this description of property.

3d. The knowledge of this risk is one of the leading hindrances to improvement in the breed of that useful and noble animal, the horse. Men of capital are slow to invest large sums in a valuable animal, whose loss they must every day risk, to the amount often from five hundred to a thousand dollars, in every valuable breeding horse.

With the ample security to be afforded by sound Insurance Companies, the investment of capital in horses and live stock may be made as safe and safer than the carrying of freight on the seas and inland waters. Marine Insurance has rendered this last business steady and profitable; while without it, it would want the confidence which that branch of business now commands. The absence of this Insurance in the case of live stock is universally felt, while the owner of real estate can command half or two-thirds of its value when needed for an emergency.

While the owner of the ship, "the play thing of the wind and waves," may obtain any reasonable advance; the owner of equally valuable property, invested in horses and cattle, cannot obtain a dollar. The only exception being fat cattle destined for market. In vain does the owner of the horse appeal to his industry or usefulness. The answer is, that his property is liable to disease and accident, and that as security it is utterly worthless.

4th. The Insurance principle comes in, and does for him what Life Insurance has done for the young beginner in trade, taking away the risk arising from the uncertainty of life.

It will do for him what Fire Insurance has done for the owner of personal property; placing him nearly on a level with the owner of real estate.

Your aid is respectfully solicited in behalf of this company, the first chartered in this state for this object. The Directors intend it shall be prudently conducted, and one which shall deserve the confidence of the public.

Terms of insurance will be furnished by the agents of the company.

GEORGE MOORE, Secretary. JAMES FARR, President.
Dec. 1—6t.

Agricultural Books

OF all kinds, for sale at the Cultivator Office, 407 Broadway, Albany.

PROSPECTUS FOR 1852.

THE SATURDAY EVENING POST.

THE LEADING LITERARY WEEKLY OF THE UNION.

THE proprietors of the POST think it unnecessary to dwell upon the distinguishing features of their well known weekly, whose brilliant success during an existence of THIRTY YEARS, is a sure guarantee for the future. We have the pleasure of announcing our continued connexion with that distinguished authoress,

MRS. E. D. E. N. SOUTHWORTH,

Author of "The Deserted Wife," "Shannondale," &c. During the coming year, we have already made arrangements for the following nouvellettes:—

EOLINE; OR MAGNOLIA VALE:

By MRS. CAROLINE LEE HENTZ, author of "Linda," "Rena," &c.

VIOLA; OR ADVENTURES IN THE SOUTHWEST:

A Companion to "PRAIRIE FLOWER." By EMERSON BENNETT, author of "Prairie Flower," "The Bandits of the Osage," &c.

TRIAL AND TRIUMPH:

By T. S. ARTHUR, author of "The Iron Hand," "Temperance Tales," &c. And last but not least,

THE CURSE OF CLIFTON:

A TALE OF EXPIATION AND REDEMPTION. By MRS. E. D. E. N. SOUTHWORTH, author of "The Deserted Wife," &c.

The POST will also contain every week, Selected Articles of the choicest description, One or More Engravings, Humorous Articles, the Most Interesting News, Local News, Bank Note List, State of the Markets, the Stock Market, etc., etc.

TERMS.—The terms of the POST are Two Dollars if paid in advance; Three Dollars if not paid in advance. For Five Dollars *in advance* one copy is sent three years. We continue the following low terms for Clubs, to be sent in the city to one address, and in the country to one post-office:—

4 COPIES,		$5 00	PER ANNUM.
8 "	(And one to Agent, or getter-up of the Club,)	$10 00	"
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The money for Clubs must always be sent in advance. Subscriptions may be sent at our risk. When the sum is large, a draft should be procured if possible—the cost of which may be deducted from the amount.

ADDRESS, (always post-paid,)

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No. 66 South Third Street, Philadelphia.

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Jan. 1.—1t.

FARMERS, HORSE BUYERS, BREEDERS, BREAKERS, SMITHS, &c.

BEST WORK ON THE HORSE.

SENT FREE OF EXPENSE BY MAIL.

NOW ready, the Seventh Thousand of "Youatt on the Structure and Diseases of the Horse," with their remedies, brought down to 1846, by W. C. Spooner, M. R. C. V. S., to which is prefixed an account of the breeds in the United States, compiled by H. S. Randall, with 55 illustrations, large 12 mo., 483 pages—price $1.50, and for sale by booksellers generally, throughout the United States.

Orders should be addressed to

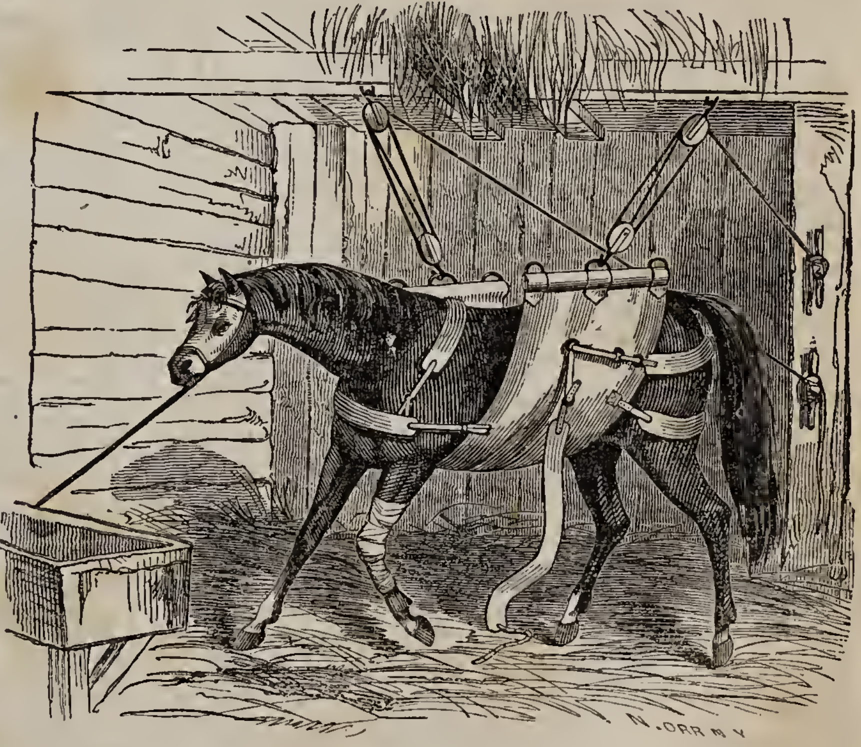
DERBY & MILLER,
Publishers, Auburn, N. Y.

N. B. On receipt of the price we will forward one copy free of expense to any place in the United States.

"Every man who owns a good horse—the noblest, as well as the most useful of animals, owes it to himself to understand well, matters pertaining to his healthy preservation. Randall's 'Spooner's Youatt,' is the greatest work of the age upon this particular topic."—Am. Courier.

"No less valuable than the animal it describes. Every man who owns or drives a horse, needs this book as much as a horse needs a harness in which to perform his labors, if he would know how to make his beast of the greatest possible service to him."—Boston Farmer.

Jan. 1—3t. j.m.m.



ANDRE LEROY,

Nurseryman, at Angers, France,

RETURNS his thanks for past favors, and begs leave to inform his friends and the public in general that his catalogue for 1851 is now ready and can be had on application to his agent Mr. E. Bossange, 138 Pearl street, New-York. He offers for sale a large collection of the finest fruit, forest and ornamental trees of all kinds, shrubs, roses, &c. &c. The superior quality of his trees is already known in the United States, and the experience he has of packing up trees to be sent abroad gives him a noted advantage over all other Nurserymen. Orders had better be sent early, although his Nursery is the largest in France, the number of some new kinds of trees are limited and some of the last orders sent last year could not be executed. The terms, prices, charges, and all desirable information will be found in his catalogue. The trees will be shipped to the care of his agent in New-York, who will attend to the receiving and forwarding. For further particulars and for the catalogue apply to

Nov. 1, 1851—3t. E. BOSSANGE, 138 Pearl street, N. Y

I. T. GRANT & CO'S

Patent Fan Mills and Grain Cradles.

WE continue to manufacture these Celebrated Mills and Cradles. Our Mills have been awarded seven First Premiums at the New-York State Fairs—three Silver Medals at the great American Institute in New-York—also at the State Fairs of Pennsylvania, Maryland, Michigan and Ohio, and at a large number of County Fairs. They have never been awarded the second premium—always the first, and they stand without a rival. We feel confident in recommending them as the best in market.

Our CRADLES have taken the First Premiums at two New-York State Fairs. We have made valuable improvements on them the last year, for which we have letters patent. They can be taken apart and packed in boxes, and put together again, with very little trouble, by almost any one.

Orders solicited from, and work sent to any part of the United States.

I. T. GRANT & CO.
Junction P. O., Rens. Co., N. Y

May 1—e.o.m.—6t.

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University of Albany.

Theory and Practice of Agriculture

THE Trustees announce the following Courses of Instruction for the ensuing winter, to commence on the 13th of January, 1852, and continue three months.

The facilities for the prosecution of those branches of science connected with agriculture, although not yet perfected, will, it is believed, be far greater than have ever before been offered in this country. The Courses to be given are intended to be intelligible to every practical farmer, and at the same time to point out the leading and the special advantages of scientific applications. To accomplish this end the lectures will be fully illustrated by experiments, diagrams, numerical tables and specimens, while the use of scientific terms will be confined to such as are absolutely necessary to the comprehension of the various subjects presented. Conversational recitations will also be held in connection with the lectures, so that all who wish may have opportunities for seeking the explanation of every difficulty.

The general course on *Scientific and Practical Agriculture*, will be delivered by Prof. John P. Norton, of Yale College, and of the University; and will commence on the second Tuesday of January, and continue about three months, at the rate of three lectures in each week. Tickets for the course, $10.

The course on Geology and Palæontology, will be given by Prof. James Hall, of the New-York Geological Survey, and of the University of Albany. This course of lectures will be given with especial reference to its applications in agriculture, in civil engineering, the mechanic arts, and to mining. It will commence on the second Wednesday of January, and continue for three months, at the rate of five lectures in each week. Tickets for the course, $10.

Dr. Henry Goadby, formerly of the Royal College of Surgeons, London, will deliver a partial course on Entomology, with special reference to agriculture, commencing on the third Friday in January, and continue at the rate of two lectures in each week. Ticket for the course, $5.

In addition to the above courses, the students will have the opportunity of attending a course of lectures on Astronomy, by Prof. O. M. Mitchell, of the University, and on Elementary Chemistry, by Prof. Geo. H. Cook, Principal of the Albany Academy.

☞ For Circulars and other information apply to B. P. JOHNSON, Esq., State Agricultural Rooms, Albany.

Albany, January 1, 1852.

Improved Stock.

CATTLE, of the Durham, Devon, Hereford, Alderney, and Ayrshire breeds.

SHEEP, of the Native and French Merino, Saxony, South-Down, and Cotswold.

PIGS of the Lincoln, Suffolk, and Berkshire breeds.

From our long experience as breeders and dealers in the above kinds of stock, and our excellent situation for purchasing and shipping, we think we can do as good justice to orders, as any other house in the United States.

A. B. ALLEN & CO.,
Jan. 1, 1852—tf. 189 and 191 Water st., New-York.

N. YORK AGRICULTURAL WAREHOUSE.

A. B. ALLEN & CO.,

189 *and* 191 *Water Street, New-York.*

PLOWS of a great variety of patterns and different sizes, calculated for sward and stubble land, wet meadows, and recently drained swamps where roots abound. Among these plows, also are the deep-breaking-up, flat-furrow, lap-furrow, self-sharpening, side-hill, double-mould-board, corn, cotton, cane, rice, and subsoil with single or double wings.

HARROWS, triangular, square, Geddes, and Scotch.

ROLLERS, with iron sections one foot long, and of different diameters. These can be arranged on an iron shaft for any required width.

CULTIVATORS of upwards of twenty different kinds, steel tooth and cast iron.

SEED SOWERS of six different kinds and prices.

HORSE POWERS, endless chain and circular, of wood and cast iron.

THRESHERS, with or without Separators.

GRAIN MILLS of cast iron, and burr stone, to work either by hand, horse or water power.

CORN SHELLERS, single and double, large and small cylindrical to work by hand or otherwise.

STRAW CUTTERS, spiral, straight, or circular knives.

VEGETABLE CUTTERS for turneps and other roots.

Together with a great variety of all other Agricultural and Horticultural Implements kept in the United States, such as Hoes, Shovels, Spades, Rakes, Manure and Hay Forks, Grain Cradles, Scythes, Snaths, &c. &c.

CASTINGS of all kinds for Plows, Cotton Gins, and Sugar Rollers.

WAGONS and *CARTS*, for horse, ox, or hand.

STEAM ENGINES for farm and other purposes.

Our implements occupy three large stores, and we believe they make up the largest and most complete assortment in America. In addition, we have a machine shop employing upwards of one hundred men, where any articles in our line can be made to order.

A. B. ALLEN & CO.,
Jan. 1, 1852—tf. 189 and 191 Water st., New-York.

FARM SCHOOL.

THE Mount Airy Agricultural Institute, located at Germantown, Pa., will open for the summer term on the first Thursday of April next. For particulars address the Principal,

JNO WILKINSON,
Jan. 1, 1852—3t. Germantown, Pa.

State Agricultural Warehouse.

EMERY'S, Kell's, and Wheeler's Horse Powers and Threshers.

Hovey's, Clinton's, Tower's, Sinclair's and Botts', Straw and Stalk Cutters.

Vegetable Cutters for slicing up potatoes, beets, &c.

Corn Shellers of various patterns.

Fanning Mills of Bryan's make—this is considered one of the best Mills in use.

Clinton's, Bamborough's and other makes.

Prouty & Mears' premium Plows of all sizes.

Minor & Horton's and Eagle Plows.

Harrows of Geddes, Triangle and Scotch patterns.

Paring Plow, a superior article made under the direction of Prof. Mapes.

Subsoil Plows, of Wier's pattern, which is half the draft of the old style.

Ox or Road Scrapers, Seed Sowers, Cultivators, &c.

Field and Garden Seeds.

Fertillizers, such as Guano, Bone dust, Bone Coal, Plaster, Poudrette, Bone Manure and Sulphate of Soda. For sale by

GEO. H. BARR,
Jan. 1, 1852—1t. No. 25 Cliff street, New-York.

Balsam Fir, Arbor Vitæ, and other Forest Trees.

HENRY LITTLE & CO., of Bangor, Maine, will furnish any number of Evergreen and other Forest Trees, taken up with *earth on the roots*, with the greatest care, and sent to any part of the United States by Steamers or Railroad—and carefully packed in large boxes, at short notice, at the following prices, viz:

From 6 inches to 1 foot, at 1 cent, or $10,00 per 1000.
From 1 foot to 2 feet, at 1½ cents, or $15.00 per 1000.

The above prices refer more particularly to Balsam Fir and Arbor Vitæ Trees.

We charge what the boxes cost, but nothing for packing.

For two years past, the trees we have procured and sent to a distance, have lived generally, and have given good satisfaction. Evergreens will not live unless taken up with great care.

Bangor, Jan. 1, 1852—4t.

THE CULTIVATOR

Is published on the first of each month, at Albany, N. Y., by

LUTHER TUCKER, PROPRIETOR.

$1 per Ann.—7 Copies for $5—15 for $10.

☞ All subscriptions to commence with the volume, (the Jan. No.,) and to be paid in advance.

Advertisements.—The charge for Advertisements is $1 for 12 lines, for each insertion. No variation made from these terms.

THE CULTIVATOR.

TO IMPROVE THE SOIL AND THE MIND. C F Morton

NEW SERIES. ALBANY, FEBRUARY, 1852. VOL. IX.—NO. 2.

The Sub-division of Farms.

WE once had occasion to spend some hours at the residence of an acquaintance, who was a very successful raiser of fine fruits, and who had a profusion of garden luxuries from his well-treated grounds, but who, from some unaccountable cause had built a house that seemed to be,

> "A mighty maze, and *all* without a plan."

For the rooms, instead of being arranged with a view to convenience, appeared to have been thrown together according to chance,—very much like a heap of railroad baggage after a collision. The common entrance was through the wood-house into the kitchen, which formed the sole means of access to the dining-room; and to pass from the latter to the parlor, it was necessary to walk through a portion of the open yard, or in common phrase "to go out doors." Now, this may seem eminently ludicrous to the lover of order, but certainly not more so than the arrangement of many a farm. How far, for example, would the reader of this article be compelled to travel, to find the farmer who is in the practice of passing through one field to reach another—who must cut a road through the grass of his meadow, to enter a field of ripened grain, or to demolish whole rows of unripe corn that he may draw to his barn the contents of the meadow.

We have many volumes of instructions and illustrations to show us how to plan and build our houses; but not one on laying-out farms. Is it because fences cost less than dwellings? This cannot be; for let any one who occupies a hundred acres, well fenced, but make the estimate, and he will find that he is compelled to keep up, even on this small domain, no less than four miles of partition walls between his fields, and the cost, with repairs, to be quite equal to that of a good farm-house. Is it because easy access to all parts of a farm is not essential to good husbandry? Can the farmer travel more easily a needless furlong, than the housewife can take five unnecessary steps from the kitchen to the dining-room? Is it easier for the farmer to draw a load of manure over a hill fifty feet high, or through a mudhole a foot and a-half deep, than his partner within doors to descend and return from that nuisance in domestic arrangement, a cellar-kitchen? A moment's reflection must show that a well planned sub-division of a farm lies at the very foundation of convenience, system, and economy.

Let the reader carry out in figures the actual yearly cost of a single awkward defect. To drive a herd of cows a half mile between the barn-yard and pasture, may seem a slight task; but when this is repeated four times daily for eight months of the year, the aggregate distance to be traveled is greater than from Buffalo to the Atlantic; and not performed as the latter is with fire-car and the tempest's speed, but with the toilsome labor of the pedestrian or drover. A slight improvement in the plan might perhaps easily lessen this journey a hundred miles. When therefore the whole amount of other farm-travelling is taken into consideration, with loaded carts and without them, the subject of arrangement becomes one of no mean importance.

In furnishing specimen plans for laying-out farms, a difficulty will suggest itself, namely, the endless variation in their interior and exterior forms, in the position of hills and valleys, marsh and upland, in woods, springs, and water courses, and in intersections by the public road. This difficulty will however be greatly reduced, by adopting a few general plans with the leading principles, which may be modified according to circumstances.

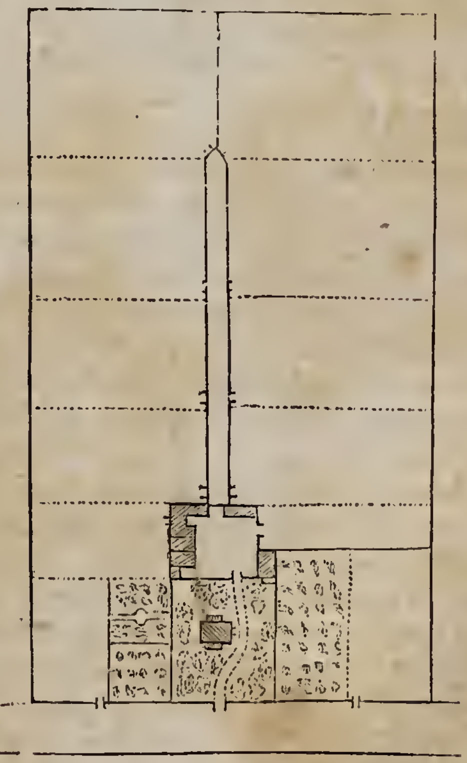

FIG. 1.

The most simple piece of ground, and the most easily laid out, is the nearly level parallelogram. There are many such in the country, and when the size is moderate, they usually lie with a narrow end to the public road. Such a one may be easily laid out into fields as shown in the annexed figure, (Fig. 1,) where every field is entered from the common lane, and the operations in each kept entirely separate from all the rest. The boundary fences, and those forming the lane, are permanent; the others may be moveable, to vary the size of the fields, or to bring every portion of the farm into occasional cultivation. The smaller divisions, for garden, calf-pasture, hog-yard, &c., are placed near the buildings. This is perhaps the simplest mode of properly sub-dividing a farm, and with some slight variations will apply to a large portion of those of more moderate size. We furnish a single instance of a modification to suit a farm of uneven surface. Suppose for example, that at the field A, there is a high and broad hill, extending nearly across to the opposite boundary; and at B there is another hill, stretching as far in the other direction. A valley will be thus formed from C to D. Fig. 2 exhibits the form of the first plan varied to apply to this piece of ground. To avoid going over the first hill, the lane bends so as nearly to pass round it, rising however gradually as it extends backward, until at E it crosses the valley, and continues to rise by a moderate ascent to its termination. A bridge and embankment are made at the crossing, the cost of which will be according to the means of the proprietor, and also adapted to the amount of cartage across it.

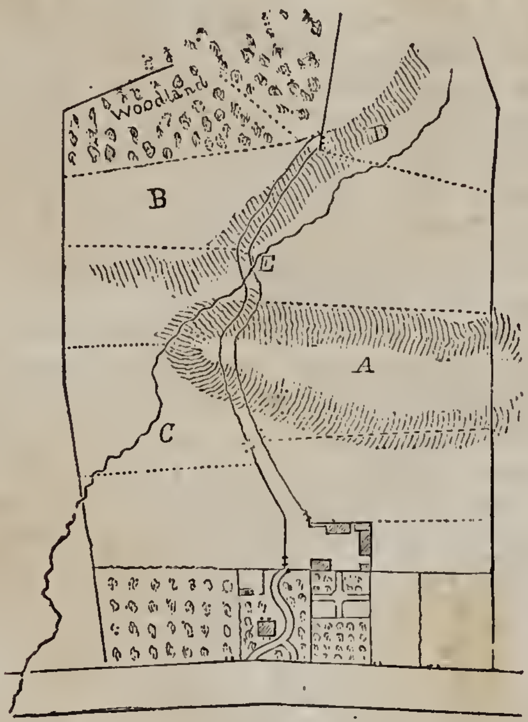

Fig 2.

Here, some one who prefers driving a load up hill and down hill three hundred times in the year, to spoiling a pretty plan *on paper*, exclaims, "How crooked! How distorted! I want all my fields with straight boundaries—and no crooked lanes running through my land." Such a farmer would have no deflections in the public roads to avoid mounds or gulfs, but would prefer mounting right over a hill a hundred feet high, to bending a hundred feet to the right or left, for a level. To such an one these remarks are not addressed, but to those only who prefer making all their flexures in a horizontal plane, rather than in a perpendicular one. We have indeed seen those who for years had drawn in all their farm crops, and returned all their manure, over a laborious ascent and down an inconvenient plunge, and we could not help wishing that they might at least make a short trial of a few easy curves with a fine level road, even though the beauty of the plantation, as seen from a balloon above, might be somewhat diminished.

Large farms usually border the public road for a greater breadth than smaller ones, and hence a different arrangement becomes necessary. The annexed plan, (Fig. 3) represents one of this sort, with the disposition of the farm-road and fields. The two extreme fields adjoining the public road, are entered as in the first plan from the latter.

This subject might be very easily extended to an indefinite length, but we close with a few general rules, which, if borne in mind, would be of essential use in planning the sub-divisions of every farm:—

1. The farm-road or lane should be as short as possible in connecting the fields with the buildings. If *much used*, the *form* of the fields if needed, should be made to conform to this requisite, and to its levelness.

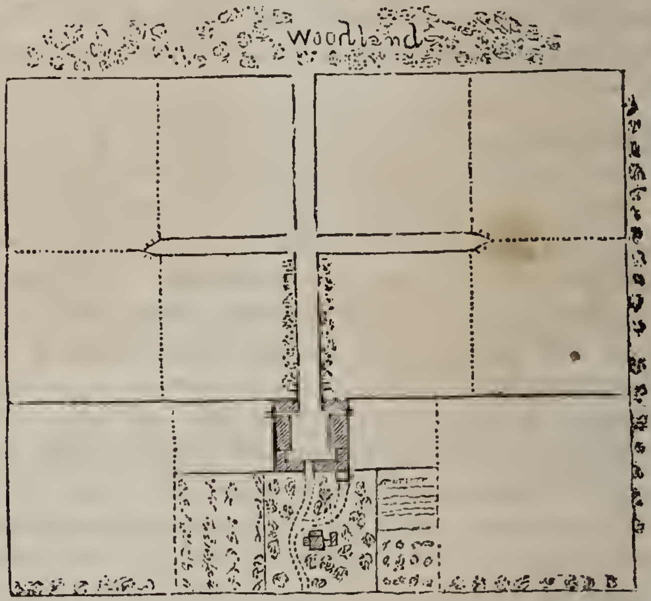

Fig. 3.

2. The barn and other farm buildings should be as near as practicable to the centre of the arable land, for economy and expedition in the cartage of manure and crops; at the same time that access to the public road should not be forgotten.

3. The number of fields should be accommodated to the system of rotation established on the farm, and should therefore be as nearly as may be of equal size.

4. The fields should be made nearly square, for economy of fencing material and to save occupancy of land by boundaries, less being needed for a square than for any other rectangular form.

5. When the land varies greatly in character, as in wetness or dryness, &c., such as is most similar should be brought within the same boundary, to be subjected to the same treatment in rotation. Dissimilar fields may however be often rendered alike by draining and subsoiling, when not otherwise easily subjected to a regular system.

6. Bringing streams of water alongside the fences, rendering facilities for irrigation, and also supplying water to each field, should not be overlooked.

7. Hills should be brought near the centre of fields, to enable the plow to pass around them to throw the earth downwards from the mould-board.

8. The area of each field should be determined, to enable the farmer to judge of the requisite quantity of seed and manure—and to measure the amount of crops, and time required for mowing, reaping, plowing, &c.

Prairie Farming---Breaking the Sod.

Many false impressions have gone forth among the eastern farmers, in regard to the expense of breaking a prairie sod; and to those who may contemplate removing to a prairie country, a few facts exemplifying the method of executing this work, and its average cost, when done by contract, might be found interesting. It is a very common practice throughout the entire western prairie country, to get the sod broken by contract, at a given price per acre, which ranges from $1.50 to $2.50 according to the character of the work, and the local influences governing the value of labor. The plow mostly used in breaking sod, turns a furrow two feet wide, and in some cases as high as thirty inches are turned, but the average may be rated at eighteen inches, requiring three yoke of oxen to do the work with ease. From two to three acres per day are plowed with an ox team, requiring one man to hold the plow, and another to drive. Tolerably good wages are made, at an average of two dollars per acre; and when all things are considered it cannot be said that it costs more to break up a prairie sod, than to plow an old meadow in one of the eastern or northern states. From two and a half to three inches, is the usual depth that the soil is broken, and the thinner it is plowed the better, so long as the vitality of the roots of the grass is destroyed. Advocates of deep plowing would not find their theory to work well, in breaking up prairie, from the fact that the thinner it is plowed the sooner will the roots of the grass undergo decomposition. When once broken, the case becomes altered. So soon as the first crop is harvested, deep plowing is no where productive of more favorable influence than on a rich, vegetable prairie soil, recently brought into cultivation.

In breaking prairie sod for corn, the work is sometimes done late in autumn, but more frequently it is performed in the spring, and the corn is planted immediately upon the inverted sod, in rows along the interstices of every alternate furrow. A small hole is cut in the sod with an old axe, or a grubbing hoe, in which the seed is deposited, and covered; and the crop from that time forward, receives no cultivation, or attention, till it is matured, ready for harvest. The average yield by this management, ranges from twenty to fifty bushels per acre; and about thirty-five bushels may be a fairly computed product, when the work is done in good season, and in a creditable manner. The extreme toughness of the unrotted sod, precludes the possibility of working the crop, and indeed nature herself wisely provides for the extermination of the wild grasses and plants, that so profusely spread over the prairie surface, requiring only on the part of the husbandman, a single plowing, by which the soil becomes divested of every species of herbage except such as may be planted by the hand of man.

Nothing can be so perfectly clean, as a virgin prairie soil, but owing to the prevailing manner of cultivation, the lapse of a very few years only, is required to overrun the whole surface of the land with a growth of weeds, such as can no where be found except in a prairie country. Those weeds being annuals, are easily extirpated; but when they once take possession of the soil, they impart a very unsightly appearance, ranging as they do, in most cases, from three to five feet in height; and the cost and difficulty in destroying them, are quite equal to the expense of bringing into cultivation a prairie sod. Indeed, on many accounts, an unbroken prairie is preferable to a farm that has been carelessly cropped six or eight years. This fact must become apparent to any one who will take the trouble to investigate the matter; and it is here mentioned as a warning to those who might be inclined to pay an exorbitant price for improved prairie farms, as they are sometimes called, when so overgrown with weeds as to make it almost impracticable for a person to pass over the fields without incurring the risk of being lost!

The best month in the year for breaking prairie is June, and when it is intended to sow the land with wheat, it is advisable to have the work executed at as early a period as this month, so that the sod may obtain a perfect rot before the period for seeding. In some cases the land is plowed a second time, and some prefer doing it crosswise of the furrow, and others lengthwise; but it is universally conceded that if the rot be perfect, so that a heavy harrow will completely pulverize it, the second plowing will not contribute in increasing the product of the wheat crop, and, therefore, only one plowing is usually given.

Along the borders of the wood-land, vast thickets of hazle brush abound, which extends itself yearly into the prairie. The land where the hazle grows is usually undulating, and the vegetable soil is much thinner than on the open prairie. It costs about $2.50 per acre to break up hazle brush land, and not less than four yoke of oxen are capable of doing the work. The average height of the bush is five feet, and with a strong plow and team, a furrow of two feet in width may be turned under with the greatest ease. The roots of the brush soon decay, and in a dry time the whole mass of brush and roots are burned, leaving the land in the best possible condition for a wheat crop.

In Illinois and Iowa, and Upper Missouri, the finest and most perfect plows are in use, and indeed some of the patterns could scarcely be improved, either in lessening the draft, or rendering the work more easy for the plowman. The strength of this conviction became increased by repeated practical trials, and after giving the matter a full and impartial investigation, we became convinced that a prairie sod had no equal as a test, to put to trial the skill of a scientific plowman; and that some of the most improved steel mould-board plows were so perfectly adapted to the character of the work, that any further attempt at improvement would be abortive. The best plows are suspended on two wheels, supported by an axle near the end of the beam. The wheels are twelve inches broad on the surface, the one following in the furrow guides the width of the furrow slice, and the one on the sod acts as a roller to break and smooth down the prairie grass. By the aid of a lever the wheels are hoisted up, so as to expedite the turning of the plow at the head lands, and the only thing the plowman has to do, is to set the plow at the turnings, as the wheels guide it quite as perfectly as could be done by the most experienced plowman. W. G. Edmundson. *Keokuk, Dec.* 1851.

Superficial Farming.

A prominent cause of small profits and poor success in many of our farmers, is the parsimonious application of capital, in manures, implements, physical force, and convenient buildings. In their eagerness to save at the tap, they waste freely at the bung. They remind us of the cultivator who candidly admitted his unprofitable system of farming; "but," said he, "I am not yet rich enough to be economical." We observe by a late number of the Mark-Lane Express, that the present *medium* estimate in England, of the capital required to carry on the business of a farm, is £8 (about 40 dollars) per acre, "and no prudent man *ought* to rent more than he has that amount, at least, of available capital to go on with; for a smaller possession, with ample means to manage it, will yield better returns than a large quantity of land inadequately stocked." Now, some of our best farms can be *bought* for about the same sum that the English farms are *rented*, and if the above remark is applied to purchasing, instead of renting, it will constitute excellent advice to Americans. This is a subject for a large volume; and we have only space now to say, that if the landowner has not suitable buildings, the value of the grain and fodder wasted in consequence, would soon pay for them; and the food and flesh wasted by exposed and shivering animals would soon pay for them a second time. The want of manure will prevent the value of crops from rising higher than the cost of cultivating them; and the want of heavy crops, to feed animals, will preclude keeping enough to make plenty of manure. In other words, a poor and badly cultivated farm will react, and only support a poor and badly-fed race of animals and men,—just in the same way that a fertile and thoroughly tilled piece of land will sustain animals enough to manure it and keep up its fertility, and men enough to give it thorough tillage.

Successful Culture of Melons.

Dr. Hull of Newburgh, N. Y., gives a statement of his method of culture in the Horticulturist. Holes two feet in diameter, and nearly two feet deep, dug in *trenched ground*, were filled, the lower half with equal parts clay loam and *fresh* manure, and the upper half with clay loam and *old* manure. Hills five inches high and four feet in diameter were then formed of equal parts of *poudretted muck*, (a barrel of Lodi poudrette to a cord of muck,) *sand*, and decomposed turf. The plants were started on inverted sods in a hot-bed. These hills were six feet apart from their centres, and the whole spaces between the centres were mulched with long litter. The bugs were completely expelled by watering the plants daily with a strong decoction of *quassia*—made by pouring four gallons of boiling water on four pounds of quassia in a barrel, and after 12 hours filling the barrel with water. The intolerable *squash or pumpkin bug* was thoroughly driven off by a decoction of double strength, containing a pound of *glue* to ten gallons, to make it adhere.

The product of a piece of ground 40 by 180 feet, was *sixteen hundred superb melons.* It ought to be added, that if the ground is not trenched, the holes should be much larger; and where the soil is light instead of clayey, *rotted* or *fine* manure only, well mixed with the earth, should be used, to prevent injury by drouth.

Importation of Hereford Cattle.

Mr. Erastus Corning Jr., of Albany, has recently imported a pair of Hereford cattle, purchased by him when in England, last season, of Rev. J. R. Smythies, of Lynch-Court, Herefordshire. The heifer is two years old, past, and the bull a year younger. The writer has had the pleasure of seeing these animals, and cannot refrain from expressing his gratification that so great an acquisition as they, in themselves are, has been made to the farming stock of the country. The heifer is a most perfect model of beauty, combined with the points which indicate constitution, thrift, fine quality of flesh, and weight of carcase with lightness of offal. Although just off a long voyage, at an inclement season of the year, she is in high condition, and her flesh was, we are assured, acquired by grass. The bull suffered more from the voyage, and is at an age to appear to the least advantage; but he has points which show that he will make a strong and valuable beast. The animals do credit to the character of the breed, the skill of the breeder, and the judgment of the persons who selected them.

Mr. Smythies is a veteran breeder. More than thirty years ago, the writer was interested in reading his spirited articles, which appeared in the London *Farmers' Journal*, in advocacy of his favorite Herefords. He has been a very successful competitor for the prizes of the Royal Agricultural Society, and of the Smithfield Club. The former association, in 1839, offered a prize of fifteen sovereigns for the cow "best calculated for dairy purposes"—the competition being open to all breeds in the kingdom. This prize was awarded to Mr. Smythies for a Hereford—a second prize being awarded to a Short-horn. This was the only occasion on which that society has brought the different breeds into competition with each other—the class alluded to having been from that time abolished. The shows of the Smithfield Club, are for fat cattle; here all breeders compete together, and the success of the Herefords is too well known to require details here.

Mr. Smythies has offered several challenges to the breeders of Short-horns and other cattle, to test the merits of the several breeds, by actual trial, on a fair scale; but they have not been accepted.

Mr. Corning has exhibited a commendable enterprize in the introduction of these fine animals, which with others of the same breed, previously in his possession, will enable him to produce stock of high value. S. H.

A high Chimney.—A late paper states that one of the great chimneys built in Glasgow to carry off the smoke and create draft, belonging to the iron works of that city, lifts itself up to the enormous height of *four hundred and seventy feet.*

Apples in Western New-York.—Moore's New-Yorker states that notwithstanding the great defect in both quantity and quality of apples, the past season, the county of Monroe furnished but little short of 200,000 bushels.

Topping Corn---Improving Varieties, &c.

Mr. Ruffin of Virginia, has offered a set of premiums for experiments in topping corn, in all Virginia and Maryland east of the Blue ridge. The object is to ascertain by experiment, whether cutting off the tops of corn, as is the usual practice in this region, is injurious or otherwise to the crop of corn. A glance at vegetable physiology in this relation, may be useful. The leaves of plants are of the same use to the plant that the lungs are to the animal,—so say systematic physiologists. I must be permitted to add, that they, the leaves, also supply the place of the animal *stomach*. The juices containing the nourishment of the plant are taken from the earth by the roots or radicles, and conveyed through the sap vessels to the leaves, where they are elaborated and prepared, just as the food in the stomach is, and formed into chyle by the functions of the leaves and the action of the atmosphere. Thus prepared, this chyliferous fluid then descends through another set of vessels to the various parts of the plant, to supply the material each may require for use. A portion of it is required for the increase of the body of the plant,—woody fibre, &c.; another portion for the formation of flowers at a later period; another portion is required for the formation, in the case of corn, of the cob, &c. At last, the grand effort and great object of the plant, is to form seed for future plants, that is the grain, and the great object of the farmer. In the formation of this, all the powers of the plant are taxed. The saccharine juice of the plant has to be converted into starch, and this is done by the exposure to the action of the atmosphere in the leaves. Here, also, the glutinous principle is formed, and other modifications necessary to the supply of the material of the grain, are effected in the juices of the plant. These juices now descend, and the apparatus attached to each grain of corn takes up and appropriates such portion of the descending fluid as it requires for the time. In this manner and way the grain is perfected, and as soon as it is perfected, the whole plant, except the grain, is found to be completely exhausted—drained, when all the operations have been perfect, most completely of all its juices, and becomes a mere mass of dry vegetable matter. Now, if all this be true, who can doubt that the suppression of a single leaf of the corn plant, before the grain is perfected, must be injurious to the perfection of the grain? If the taking off the tops is delayed till the grain is of full size, then the operation may not diminish the *measure* of the crop, but it will certainly diminish its weight and quality in proportion to the time, in relation to the perfection of the grain, at which it was performed, and I apprehend that the only question to be considered by the farmer in any such case, is the relative value to him of the grain and the fodder. If a farmer considers the value of the corn fodder greater than that of a small depreciation in the value of the grain, caused by the topping of his corn, then he will continue to top his crop to the extent of his want of fodder. But if he has not much need of the fodder, or if by saving it he diminish the quantity or weight of his grain to a greater extent than the fodder will pay for, then he will not top his corn. The experiments, if fairly tried, will unquestionably establish these truths. Let any one measure and weigh the shelled corn from an acre that has been topped to save the fodder; and also that from an acre that has not been topped at all, and he will find the yield in the former case, less by measure or weight, and perhaps both, than in the latter case; and the difference will be more in proportion to the time of topping. The corn plant, being an annual organism, has but the one object, and that is the perfection of seed for reproducing its species, and in the performance of this one great function, it most completely exhausts itself. Wheat, and all other annual cereals, are of the same nature. If we therefore, take from them a portion of this power, in the shape of leaves, and with the leaves a portion of the very juices out of which their seeds are to be formed, how can we expect those seeds to be as perfect as they would have been had the plants been allowed the use of their whole supply of organs and nutriment? Surely this argument need not be pursued further. It seems to me that it must carry conviction to every mind. But let us resort to analogy. You have a hog in the pen fattening for pork. Suppose you suppress an eighth or a tenth of his ordinary supply of food—will he thrive as fast, or will he thrive at all? Then why expect the corn to be as well filled and perfected, if you cut off an eighth or a tenth of its supply of food? For you must bear in mind that every leaf taken from a vegetable suppresses to the extent of its proportion to the leaves of the plant, the food of the growing plant and the growing seed. If we may be permitted to question nature on this subject, we might ask why she does not stop the growth of the top and leaves above the ears, as soon as the tassel has performed its functions, if these are of no further use?

We must not omit to make a distinction between annual plants, such as corn, and perennial plants, in considering this question. Perennials do not perfect themselves in one season. They grow and increase in size, even while bearing fruit. Now these may be very properly and profitably topped—pruned—and by doing it properly, the quantity and even quality of the fruit may be greatly improved. By pruning grapevines we cause much of the power of the plant that would have been exerted in making new wood, to be turned towards the formation of fruit. As we do not want the wood, and as we do want the fruit, this is a useful operation. In the case of perennials, the plant performs two operations, the extension of its size, and the production of fruit. The annual, after it is grown, has but one duty to perform, and that is the production of its fruit or seed, and always entirely exhausts itself in the effort.

But there is a species of topping corn that I have practiced with very curious results. It occurred in my experiments in improving corn by cross impregnation. To accomplish my object I was obliged to suppress the *tassel only*, not touching a single leaf. On all these plants I found the ears were larger and the grain longer and heavier, than those in which the tassels were allowed to grow and perform their functions. Now here we can readily see the reason of the result. The tassel is a large organ, requiring a considerable portion of the nutritive power of the plant to produce and support it; if we prevent its formation and growth, we of course save to the other parts of the plant all the food that would have been required for the tassel. The consequence was as above related, a considerable increase of the size and weight of the ears and grain. I must explain that the pollen was supplied by other plants surrounding the one operated on, but at no expense to them because the pollen that fell upon the experimental plants would have been lost to its parent plants at all events. Persons disposed to try this experiment may do so safely without risk of loss. The tassel of each alternate plant in a field may be cut out just as it makes its appearance, and the *silk* or pistils of the plants will be supplied by the tassels of the neighboring plants. In this way new varieties of corn may be produced at pleasure and with little trouble. Indeed the wonder is that while we are ranging the wide world over in search of new grains, fruits, and vegetables, so little is done to produce new ones and improve old ones at home. In the case of corn, I affirm that every improvement that can be desired, can be effected in it. It can be made late or early, large cob or small cob, large or small grain, hard and flinty or soft and flowery, white or yellow, by the simple method of cross breeding. It is infinitely more easy and certain than the processes of improving animals, and in my opinion infinitely more important to the public and to private interests. Suppose a farmer desires a kind of corn that ripens earlier than the kind he cultivates. Let him get some early kind, and plant it alternately with his late kind, allowing at the time of planting for the difference of time each one ripens. If his late kind ripens on the 15th September, and the early kind ripens on the 15th of August, then he must plant the late kind just one month before he plants the early kind. They will then come into flower,—that is tassel and silk, together. When the tassels begin to show themselves, let him carefully cut out all the tassels from the early kind. This is all he has to do. When the corn is ripe, select the earliest and best ears from the early kind, plant the grain by itself the next year. He will find the produce will be a mixture of the two kinds planted the first year, as to color, but they will all be early. At harvest select the grains desired, and the third year will produce the crop desired. In this way any change or improvement in corn can be accomplished.

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Growth of the United States.

Hon. Lewis Cass, in his late address before the Michigan State Ag. Society, presented the following striking illustration of the rapid growth of this country from its first settlement:

"I have said upon another occasion, but the circumstance is so striking and characteristic that I must repeat it here, that I have often conversed with a venerable relative who was a cotemporary of Peregrine White, the first child born to the pilgrims after their arrival on this continent. What an almost appalling idea does this simple fact present of the progress and prospects of this vast Republican empire! But one life passed away between the first and the latest born of one of its great communities—between its infancy and its maturity—between its weakness, almost without hope, and its power, almost without limits—between its granary holding a few kernels of corn, and all its vast 'store-houses' whose contents, like those of Pharaoh's, we may *leave numbering, for they are without number.*"

What Foreigners Think of Us.---Continued.

Analytical Laboratory, Yale College,
New-Haven, Conn., Jan. 3, 1851.

Messrs. Editors—In reference to the concluding remark of my last letter, I would say first, that few of those who write or speak upon agricultural subjects, have given enough heed to comparison in the starting point of a district, when treating of its present condition. We may pass from a rich highly cultivated district, into a poor barren region, where appear on all sides signs of imperfect and ill managed agriculture, and our first impulse is to condemn the one and praise the other; but after all it may really be the case, that the latter has for the last ten or twenty years made far greater progress than the former. Its farmers have had to struggle with the disadvantages of a poor worn out soil, bad climate, and consequent general depression. Probably too the facilities for communication and transportation have been limited, while in the former case the reverse of all these conditions, has long ago laid the foundation of wealth and lasting prosperity. We are of course disposed to flatter and praise the agriculturists of the one district, while we condemn those of the other, but in this we often do a most serious injustice.

I remember a striking case of this kind. I once spent some days in one of the Western Hebrides, with an eminent scientific agriculturist, who had been invited to visit the island with the expectation that his teachings and writings would be of much benefit. Agriculture in this island at the commencement of the present century was, as in all or nearly all of the Scottish Highlands and Islands, at the lowest ebb; the earth scarcely produced enough for the wants of mere existence, and famine frequently followed even a partial failure of the scanty crops. The implements were all of the rudest and most primitive character, the few roads nearly impassible, and communication with the main land uncertain and unfrequent. At the time of our visit, the roads were sufficiently numerous and in good condition, the tools and farm buildings had become respectable, some good stock had been introduced, and the surplus produce of the island was sufficient to support a line of steamers from two different points, besides numerous sailing vessels. The original Gaelic language was fast yielding to the English, prejudice and ignorance had been overcome in a wonderful degree.

This was a great change to have taken place in a single life time; it was still incomplete; but those who knew all of the circumstances felt proud to call attention to their condition; they had really good ground for their pride, and naturally expected warm commendation. How were they disappointed then, when their visitor in one or two public lectures, compared them deliberately with the Scottish Lowlands and other highly farmed districts, finding fault with all that differed from such standards, noticing in severe terms the lack of care in the preservation of manures, in the extirpation of weeds, &c. &c., which he had noticed. His remarks were doubtless just, but I was even then led to doubt their propriety, by the ill effects they produced.

Within twenty years the Lowlands of Scotland had merely advanced from one state of good farming to another; they had added to previous knowledge, and cultivated a previously improved soil, until they stood acknowledged at the head of well farmed districts. Within the same twenty years, the Island on which we were, had emerged from a state of almost absolute barbarism, with respect to its agriculture; with no previous knowledge, with no degrees of excellence to stimulate, and scanty facilities of intercourse, the enterprise of a few individuals had disseminated right principles through the Island, until it had assumed a highly respectable and flourishing condition. Had not the advance in this latter case been many times more decided and creditable than in the former? These people felt that they had done a great work, and were proud of it, and even a little too much pride might well have been excused in such an instance; it surely was not wise to disenchant them rudely, to compare them at once with the best farmers of the world, and to make them feel an overwhelming sense of deficiency.

This was a case for warm and emphatic praise; every step of progress that had been made should have been commended and noted; encouragement should have breathed in every word. Such a course need not have made them self-satisfied and sluggish; on the contrary, a hint now and then thrown in among judicious praises, would have stimulated to farther exertion, and the people who went away discontented and discouraged, would have gone on to new improvements and new exertions.

Now, I think that the same course described above has too often been pursued in this country, and with the like ill effect. Foreigners, looking not at our comparative advance, or our circumstances of situation and climate, compare us absolutely with some high standard, and finding of course, a difference, exhaust their wit, irony, and sarcasm upon us. I am not to be understood as advocating or wishing unqualified praise from our visitors, for that is nauseating, because undeserved, but I do desire to see a man who can do us justice, who can praise as he ought, the great advances which many of our farmers have made, and appreciate the desire for improvement which prevails in so many districts. Hints of defect in certain points, and suggestions for improvement in others, would come properly from such a man, and would be thankfully received. Human nature is alike in all lands, and the majority of men will not accept even of good advice, when given in a censorious or dictatorial spirit. If a man obstinately refuses to see the good that really exists, and dwells constantly on the other side of the picture, we are insensibly disposed to combat all his criticisms, and to distrust the soundness of his opinions.

The farmers of the United States, as a class, are undoubtedly subject to some serious charges on the score of imperfect agriculture; there are whole counties, and even states, where a proper system of cultivation is almost unknown; and there are many broad and fertile districts undergoing a species of management which tends directly to exhaustion; these are melancholy statements, but true, and yet I contend that a noble minded man, free from all little prejudices, would find much to praise even among the most slovenly of our farmers, in the new states. The broad acres now smiling with golden crops, were but a few years ago, an unbroken wilderness; all the marks of civilization around, scattered and fragmentary as they may be, are the result of the pioneer's toil, and the cultivation, rude though it is, may perhaps, be better for a new country than the efforts of the most finished agriculturist of Europe.

We have existed as an independent nation not yet three-fourths of a century, and with all the commercial resources of an immense continent to develop, with the attractions of foreign trade, with unparalleled internal improvements to occupy the attention and draw forth the energies of our people, with our way to fight through untouched forests, is it to be wondered at that our agriculture has not yet attained a finished and perfect character?

I maintain that quite as much has been done as could possibly have been expected—more than any other people has ever accomplished in the same length of time, upon a similar territorial expanse. Our crops, even now, are sufficient to supply the wants of many foreign countries, and the production is only limited by the demand. Let England experience a famine, and she will find that we can fill all the ships that she can send.

Our implements are in some classes confessedly superior to those of any other nation; such axes, forks, shovels and scythes as ours, are no where to be seen; our plows have lately taken a high stand at the World's Fair, and our reapers will soon cut the crops of all Great Britain. In stock, too, we now have not only representatives from all the best blood of Europe, but whole flocks and families of high pedigree, may be found in most sections of the Union.

Agricultural papers are more numerous, and more liberally patronised than in any other country; there is probably no foreign paper devoted purely to agriculture, that has half the circulation of The Cultivator. The whole number of our papers that labor exclusively in this field, is, I suppose, considerably greater than all the rest that can be mustered in Europe, or, indeed, in the world. Agricultural societies also are numerous, active, and powerful; the New-York State Society attracts a far greater multitude to its shows than I have ever seen in England, and the shows themselves would do credit to any people.

These facts prove that we are awake to our situation, that we are aware of imperfections, and are striving to remedy them. They ought, coupled with the general and remarkable intelligence of our farming population, to excite in the breast of a generous, liberal traveller, some sentiments of admiration and respect. If a man is not capable of this, he should be somewhat restrained by salutary fear of his own reputation as an observer, for it must be obvious to any unprejudiced mind, that in a community where such papers as The Cultivator, Am. Agriculturist, Genesee Farmer, Prairie Farmer, &c., flourish, where such a Society as that of New-York State has grown up, that there is a steady and rapid improvement in progress.

But if injustice is done us, we must endeavor to show it to be injustice, not by declaiming against the inconsistency and obstinate prejudice of foreigners, but by redoubling our efforts to excel. Words will never prove us to be good farmers—actions and results may. Let us, then, swallow our resentment at misrepresentation, and take a nobler revenge by placing our agricultural practice at the head of all.

I had intended last month to devote a small part of my letter to some remarks on the communication by Mr. Bartlett, in your November No. I am aware that ashes, fresh and unleached, liberate ammonia from guano, and other highly nitrogenous manures. My intention, however, in recommending such a mixture was, that it should be made immediately before sowing; the escape of ammonia in that case would be trifling. I am obliged to Mr. Bartlett for calling my attention to this point, as the absence of any direction on the subject might lead the farmer to make the mixture a day or two before the time of sowing, if he happened to have leisure time. It would, therefore, have been better to insert a caution, or perhaps better still, to have said *leached ashes*, as these could produce no evil effect.

As to the action of gypsum in absorbing ammonia, it is rather slow and gradual; when large quantities of ammonia are liberated at once, as in Mr. Bartlett's experience with the urine and fresh ashes, gypsum could not be expected to arrest more than a small part of what escaped. Far more powerful means of preserving ammonia, would have failed of entire success in such a case. The whole subject of the influence of gypsum in agriculture, needs a careful and extended examination; all such facts as those stated by Mr. Bartlett are valuable. Yours truly, John P. Norton.

"February is a hard Month for Stock."

This has almost passed into an adage. It is usually the coldest month of the year, and as cattle are frequently fed in such a way that they grow poor from the time they come to the barn till they go out to grass again, their ability to stand the weather is less at this time than earlier in the season. Good farmers, however, understand this and see that their animals are supplied with food according to their needs. They must eat in proportion to the cold, or the fat and flesh will be wasted away in the production of the warmth necessary to sustain life. Hence they should be exposed as little as practicable to severe weather. They can usually be fed to the best advantage in the barn, or in comfortable sheds attached to the yard. They should have plenty of water, (that which is several degrees above freezing is best,) without being obliged to encounter chilling blasts to get it. Cows which calve early, should receive better food as the time of parturition approaches. A mixture of meal and bran, in equal quantities, two to four quarts a day to each cow, will be found to more than pay all costs in the increased return of butter and cheese, besides greatly strengthening the cow, and improving the condition of her calf. The same may be said of ewes and lambs. If sheep fall off in condition, the wool is injured. Much loss is sustained from this cause. The wool produced while the animal is growing poor, is weak, and gives an uneven staple.

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Large Pear.—A. J. Downing says that a specimen of the Dutchess of Angouleme, weighing *twenty-five* ounces, and measuring 15 inches round the longest way, was raised by S. Leeds of Boston, last year.

Hardiness of Grafted Apple Trees.

A correspondent, (W. M'C.) who has lately set out a large orchard of trees, and intends setting out more, wishes to know the correctness of the common objections, that apple-trees, grafted in or near the root, are liable to uneven growth, distorted trunks, unsoundness at the point of union, and liability to decay at the heart, and poor crops.

We have never seen anything to warrant the above objections to setting out grafted trees. There are some varieties of the apple, it is true, which usually grow more crooked than most natural seedlings,—such for example, as the Rhode-Island Greening, Roxbury Russet, and Fall Pippin. Handsomer trees of these sorts might be obtained by selecting very straight stocks, and grafting them at standard height. It might also prove advantageous to treat in the same way some of the slower-growing kinds, as Lowell, Red Canada, Early Joe, Dyer, Hawley, Ladies' Sweet, &c. Beyond these, there are probably no advantages in grafting high. This conclusion is founded on continued observation of thousands of old and bearing apple trees, from twenty to fifty years of age, grafted at all heights from beneath the surface to seven feet above. We have never observed any bad result from the graft out-growing the stock, or vice versa, so far as this remark will apply to the apple or apple stocks; nor does the union of stock and graft ever appear to be imperfect or unsound, nor the tree to become liable to decay at that point more than elsewhere. We have no doubt that disease and death, resulting from bad cultivation, or from an entire absence of all cultivation, good or bad, has been attributed to grafting, so prone are many to avoid self-blame. In ungenial climates, or on unfavorable soils, possibly different results might be developed, which would never become visible in regions best adapted to the growth of the apple. In Wisconsin and in the colder parts of the western country, where trees grow rapidly in summer, and are then subjected to frosts of some twenty degrees below zero, it has been found advantageous to bud or graft the more tender varieties of the apple at the height of a foot or more from the ground.

Insects on Apple and Cherry Grafts.

Eds. Cultivator—For the past two years I have been much troubled with an insect destroying my apple and cherry grafts, particularly the latter, by gnawing out the buds previous to their starting. If you can give any information respecting the insect, its habits, and mode of prevention or destruction, in The Cultivator, you will confer a particular favor. John Waters. *New Milford, Dec.* 18, 1851.

We have never met with nor known the insect mentioned above, nor suffered a similar loss to the one described, from any cause. We are unable to say anything of its habits, nor of the mode of avoiding its depredations; for our correspondent having given us no description, we find ourselves in a dilemma quite similar to that of the Chaldean magicians, (although we have no thought of claiming the wisdom they professed,) who deemed it sadly puzzling to be required to give both dream and interpretation. The only insect we know, with similar habits of eating, is the steel-blue flea-beetle, (*Haltica chalybea,*) which destroys the buds of the grape early in spring, by eating out the central parts. The turnep-fly is a near relative of this little grape-devourer.

If our correspondent will send specimens of the insect, possibly we may ascertain something further about it. Insects may be sent by mail, by enclosing them in small paste-board or tin boxes; or if they are minute, in the barrel of a large quill. A small brass thimble wrapped with paper, is a convenient case for sending them by mail. Without some protection of this sort, they will scarcely fail to be crushed.

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Page's Portable Saw Mill.

Having received several inquiries in relation to this machine, we forwarded them to our correspondent at Baltimore, Dr. G. B. Smith, who has favored us with the following reply:

In answer to the inquiries of "G." and "S. D.," I have to say that the Portable Saw Mill, noticed by me in my report of our State Cattle Show, is manufactured by Mr. J. K. Sanborn, at Sandy Hill, New-York, for the state of New-York, and I believe most of the northern states. He can answer the question as to the prices of the various sized mills. I must remark that all my knowledge of the machines is derived from seeing them work. In answer to the questions in their order, I have to say,

1st. I have seen the portable saw mill worked with four horses, with eight horses, and with portable steam engines. Of course, eight horses, or their equivalent in steam power, will work to most advantage on large logs, or logs more than 12 inches diameter.

2d. The common horse power of a threshing machine, if of four or more horse draft, can be applied to it with effect according to the power, as the power is applied to the machine by means of a band and pulley.

3d. Eight horses will work the mill with ease, cutting about three thousand feet of plank per day. A twelve horse power steam engine will make it cut 6000 to 8000 feet per day.

4th. I cannot estimate the expense of moving the machine a few miles and resetting it—so much depending upon local contingencies. I should suppose, however, that it would be a mere trifle, as the whole apparatus is as portable as a threshing machine, except being more heavy. It can be removed in a common wagon drawn by four or six horses, from one part of the woods to another, or wherever else its services may be required, and put in operation again without delay or difficulty. One person with one of these mills has cut with four horses from May to October, five months, two hundred thousand feet of lumber, and the machine had not got materially out of order.

5th. Weight of a first class saw mill about 7000 lbs., second class 5000 lbs., third class 4000 lbs. Weight of horse power for 4, 6, 8, or 10 horses about 3550 lbs. It is portable over any road or surface where so heavy a load can be carried.

Mr. Sanborn will of course answer the question as to prices of the various sizes. For the largest size, with steam engine and everything complete, the price will be about $2000. For the saw mill alone, 12 feet carriage, 24 feet ways, about $700. For second class saw mill and engine, 12 horse power, complete, about $1900. Saw mill alone about $500. Third class saw mill and engine, 10 horse power, about $1500. Saw mill alone about $300. To each of the sizes, there are various fixings necessary which cost one to two hundred dollars.

But as to the prices I do not know that Mr. Sanborn charges so high, nor that he does not ask even more. I am obliged to guess at most of them.

In conclusion, I do believe that in a timber country where lumber is wanted either for common purposes or plank roads, there is nothing equal to this portable saw mill. I have stood looking at it at work for hours and hours in admiration of its performance. I have seen the saw cut through a log, 12 feet long and more than a foot diameter, hard seasoned oak, in one minute, and in 12 minutes reduce a log of that kind to inch and a half planks.

But I have said enough. Those who want further information can readily obtain it from Mr. Sanborn, at Sandy Hill. Respectfully, Gideon B. Smith.

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Washing, Drying, and Ironing Clothes.

So very great is our difficulty of procuring female "help" in northern Indiana, and I may say the northwest generally, that washing day is rendered frequently not only one of imaginary misery, but one of real, and almost unendurable labor to the female part of our families.

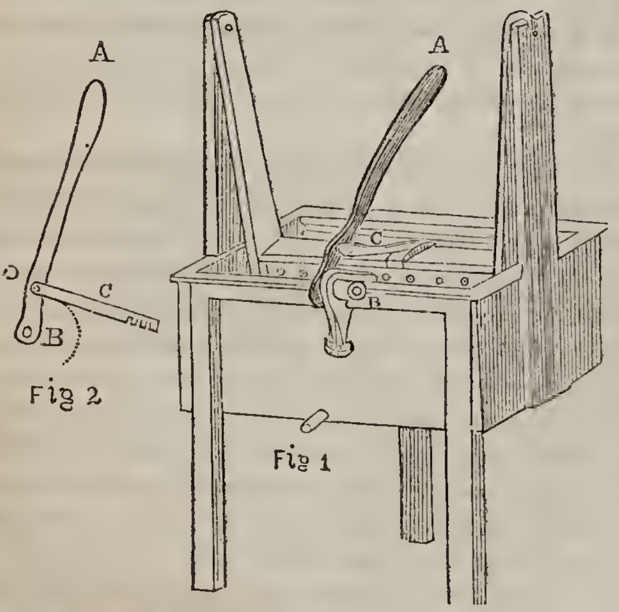
Our farms are generally large, compelling us to keep a number of hands, and though we are willing to submit to almost any tyranny from our "help," yet we will frequently find our wives in bad health, compelled upon a moment's warning, to resume the entire household work. There is no escape that we can hope for from this state of things,—so that I desire to elicit through your Journal, such modes as our ingenious eastern brethren may have found practical in transferring the labor of washing day from the hands of our females, and placing the burthen upon ourselves and sons, or even upon our horses, if it has been found practicable to do so. Many of us saw our wood with circular saws, and hence the horse-power is generally at hand. It appears to me that Yankee ingenuity certainly has devised a mode to wash by horse-power, and I remember to have seen in your paper a plan for drying clothes, by placing them in a quickly revolving box, but the details not having been given, I could not even try the experiment.

In my youth I remember to have seen a "mangle," as it was called, for smoothing clothes, instead of the flat-iron, and though I remember it did the work well, yet I have forgotten how to make one. Now, will not such friends to suffering humanity as may be able to give us the necessary information, do so upon this appeal, being assured of not only the thanks of every humane man, but of the enduring gratitude of the better part of creation.

To be specific, we need a plan of washing where the strength of man or horses may be made available. Some mode of getting the water out of clothes, except wringing by hand, and lastly, instructions how to make a "mangle," or other contrivance to supersede ironing. Hoosier. *Indiana, Dec.* 1851.

The preceding remarks of our correspondent do not give an overdrawn picture of the difficulties endured by thousands. The fact is, one great drawback in the pleasures of rural life, is the wearing drudgery to which women are frequently subjected through the absence of good domestics. We therefore think it eminently worthy the attention of every friend of rural comfort, and consequently of rural improvement, to unite in a vigorous attempt to remove the heavy burdens, which are now loading down those for whom it should be our great pleasure to live and labor. Why then should not every paper devoted to the interests of country life, be willing to occupy a large share of its columns with this very subject? We hope our correspondents will favor us with anything valuable they may possess for reducing the amount of this domestic drudgery; and in the mean time we shall endeavor to answer such of the preceding inquiries as we may be able to do.

After trying different kinds of washing machines, the one represented and described on page 319 of the Cultivator for 1848, has been found decidedly the best, the writer of these remarks having used one in his family for eight years with much satisfaction. For the benefit of our new subscribers we repeat the figure. A boy ten or twelve years of age will work it with great facility, and it requires *not a third* of the labor of rubbing on the best wash-board. It is worked by an alternating motion of the lever A, turning on the hinge or pivot B, and communicating a thrusting motion to the bar C, which moves the perforated board like the swinging of a pendulum in the trough. The leverage is precisely like the elbow-joint of the old-fashioned printing press, and hence the box should be strong, for the pressure exerted against its side is enormous. The notched end of the bar C enables the operator to regulate the space occupied by the clothes. The levers are all made of cast-iron. The whole cost of one of these machines is five or six dollars. We know of no good washing machine worked by horse power.



Washing Machine.

A wringing machine for bed-clothes, is made by providing a shallow trough about 7 feet long, set on legs like those of a bench, at one end of which is fixed, directly over the trough, a simple wooden screw-vice. At the other end is a winch (or one-hand windlass) which is also furnished with a small screw-vice. The article to be wrung is secured at its extremities in these two vices, when by turning the winch, any degree of twisting may be given, the water pouring out into the trough beneath. Where but few bed clothes are washed, a shorter trough may be made, wringing half at a time, and serving for ordinary wearing garments. The trough should be lower at one end, under which a pail is to be set for receiving the water. Most of the water in washed clothes may be pressed from them by means of the washing machine just described, first draining the trough by drawing the plug with which it is furnished.

We hope in our next number to give a description of a *mangle*.

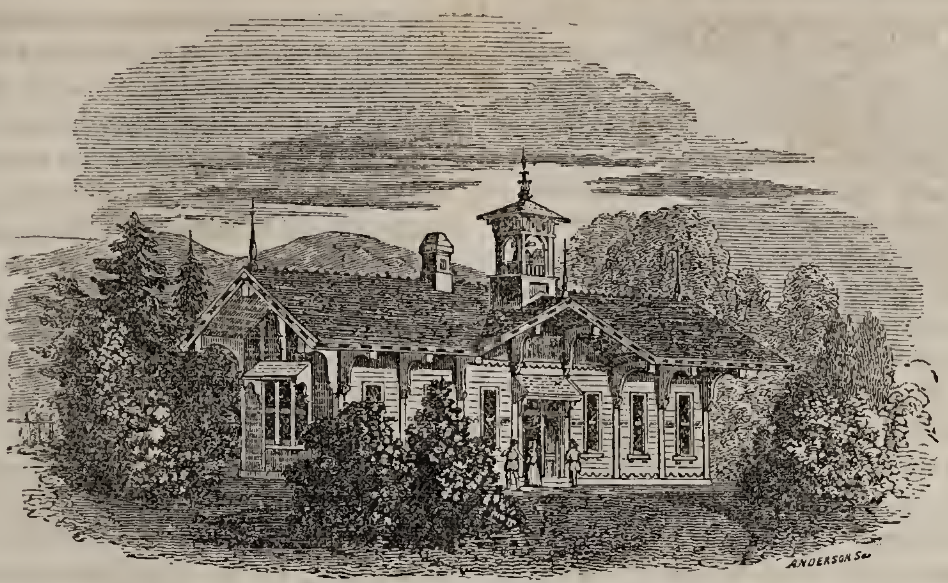
Will not some of our correspondents describe the machine for drying clothes?

We make a suggestion to our correspondent how to lessen the number of "hands" boarded in the family. Build neat cottages on a convenient part of the farm, and employ men who have families, and who will board themselves quite as cheaply as the farmer himself can do it, and pay them for this board in farm produce. The cottages must be neat, or the best hands will not occupy them; they need not be expensive. We have tried this method of getting labor with entire success.

Since writing the above, we have been favored by a kind neighbor and skilful housewife with the following directions, founded on full experience, for the use of *Crane's Soap*, which we believe is pretty widely disseminated through the country, and which may be had at a moderate price. Our own experience confirms its value, more especially on those occasions when domestics are missing, and the mistress or her daughters are compelled to do their own washing:

After having tried various methods of washing, and numerous varieties of soap, to cleanse clothes with little labor, I have become quite a convert to the efficacy of "Crane's Patent Soap" for this purpose. I have used it weekly for three months, and find it *all* that the inventor represents it to be. The ordinary clothing for a family of six persons, is generally washed, rinsed, and hung up in the course of three hours.

The process is very simple. I take a half pound of the soap, and slice it into two quarts of hot water, and keep it hot until the soap is dissolved; then pour it into a tub containing ten gallons of water, heated to about 100°. Let them soak half an hour—then rub them slightly with the hands, and if any articles are unusually soiled, I rub them on the board. It is astonishing with what ease every spot is removed. As you rub them out, throw them into a tub or boiler of scalding water, which may be kept hot by adding a dipper of hot water occasionally. Ten minutes in the scalding water is sufficient—then rinse and blue them as usual. The water in which the clothes were soaked may have a quarter of a pound, (or less according to the number of colored articles,) of soap added to it, and a little hot water. Then soak your colored clothes just as the white ones were; scald, rinse, starch, &c., as is usually done. My experience tells me that they do not fade nearly so much as with the ordinary hard soap."



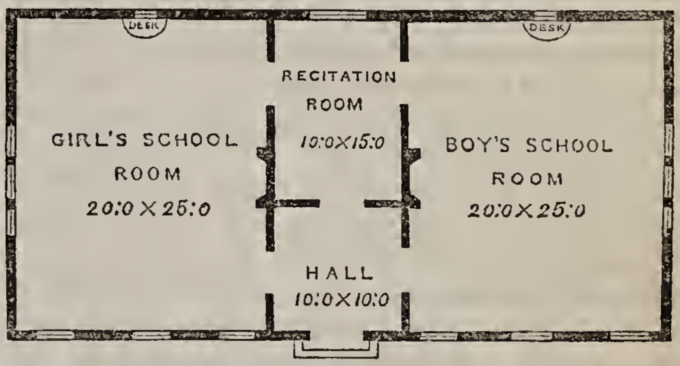
A Country School House.

No one can journey through any section of the country without being impressed with the fact, that school-houses are, generally, constructed without taste, convenience, or even comfort. Located in the geographical centre of the district—be that on a bleak hill-side or in a frog-pond—erected at as little cost as possible, with nothing without or within to make it attractive,—with no grounds save the public highway belonging to it,—like some relic of the past, stands the school-house. Popular sentiment demands better schools and more highly qualified teachers, than it did twenty years since; but in few instances, has a corresponding improvement been made in the edifices devoted to the primary, and almost the only education of children.

We present above a design for a School House, taken from the Horticulturist for January—a work designed to form and cultivate a correct taste in rural architecture.

"It has at least the merit (says Mr. Downing) of simplicity in the plan, and as it is a parallellogram, of economy in its construction. An entrance hall or lobby, opens into a large school-room for boys upon the one side, and one for girls upon the other. Between these two rooms is a recitation room, which may contain a book case for the school library. The exterior is bold and picturesque—the style a modification of the Swiss—and well adapted to many sites in our varied rural scenery. The widely over-hanging eaves afford a species of veranda shelter round the whole building. The style is exceedingly well adapted for a *wooden* building, and its details are so simple that any country carpenter of intelligence could construct such a school house without any further working drawings."

Now, we ask, does not such a building commend itself to the taste of every person, and contrast favorably with the rude structures so common everywhere? The Architect of Nature has not failed to scatter locations of beauty thick over our land, and scarce a school district can be found where a proper site for a model building does not invite attention. The additional expense of erecting a building in this style, is not worth a moment's consideration in comparison with the results, growing out of the change. The love of the beautiful is instinctive in childhood, and only the narrow prejudice of self-seeking man can see nothing to admire in the loveliness of nature, or in the fair proportions of art. Next to the attractions of the home fireside, the school should be the most desirable and inviting place. Here does mind receive its first impressions and form its tastes and character. Here does the boy fix his standard of attainment, acquire his notions of gentility and propriety, and first learn to compare himself with others. An air of neatness and elegance should be given the school house, and in point of finish, decoration and furniture should equal the best apartment of a private residence. Children would respect such a building, would love to be in it, and what is more, would form there, habits of propriety which would save the man many a bitter lesson of mortification. Children imitate the manners of those around them, and rudeness is no more *natural* than politeness. This is not mere speculation. We have seen a school house which had been in constant use for three years, upon whose carpet there were no marks of the gormandising tastes of scholars, whose neatly stained desks showed no signs of the Yankee proclivity to whittle, whose walls were disfiguaed with no semi-barbaric artistic designs; yet there had been no blows struck in that school, there were no rules to prevent injury to the building. A *gentleman* had taught the school, and as naturally as effect follows cause, *gentlemanly* and *lady-like* scholars were in attendance. It is needless to remark that intellectual improvement was in perfect keeping with advance in other respects.



Thousands of dollars are wisely laid out every year in erecting churches after the best models, and decorating them according to the most approved standards of taste; and why should not equal pride be taken in combining beauty and fitness in the district school house? If architecture be the expression of ideas of beauty, if it has a meaning, will not six days in a beautiful school house do more in impressing the mind with a correct taste, than one in a beautiful church? Each has its appropriate place, is associated with its peculiar ideas, but in point of importance are so nearly allied that they should not widely differ.

NEW PUBLICATIONS.

THE AMERICAN MUCK BOOK; treating of the nature, properties, sources, history, and operations of all the principal fertilizers and manures in common use, with specific directions for their preparation, preservation and application to the soil and to crops; as combined with the leading principles of practical and scientific agriculture, &c. By D. J. Browne. New-York: C. M. Saxton—420 pages 12mo.

The Muck Book contains a great deal of valuable matter. This has been drawn from a large number of the best authorities on the subjects indicated in the title; the numerous analyses of plants and manures, are particularly valuable, and are not to be found in any other single treatise.

In sifting out from so many authorities, we observe that a few portions of chaff have found their way among what was intended for clear grain. One of these is the recommendation of common and voltaic electricity to hasten the growth of vegetables, *by burying wires in the soil.* How is it possible that the minute portions of electricity brought down into the earth by these wires, should be of the least benefit to plants, since the moment the fluid reaches the moist earth, it may be dissipated thousands of miles in every direction in a moment of time! This experiment is recommended for trial; but it was tried some years ago, in various parts of the country, by those who did not see its theoretical absurdity, with about as much effect, (as a western editor who tested it amply remarked,) as if two toads had sat winking at each other from opposite sides of the garden. It is true, the drill of beans and peas, planted immediately over the wire, grew much more vigorously than the others, in consequence, solely, of the deep trench of mellow earth made in laying the wire; and the grape-vine which grew so astonishingly at the foot of the lightning-rod, received its vigor from the deep bed of loose soil excavated in setting the foot of the rod into the ground. This was all. We are much in favor of experiment, when there is any probability or even possibility of success; hence we should not summarily reject the *twenty-six recipes*, given in the Muck Book, for special manures for different plants or crops; although their indiscriminate application to all kinds of soil, whether containing the same ingredients or not, might be regarded as approaching empiricism.

But we did not intend to write a review of the work, but merely to invite attention to its contents, the great body of which possesses high value, especially to the investigating farmer, to whom an occasional sprinkling of doubtful matter can be no objection, as such a farmer does not or ought not to take statements merely upon trust. Those who wish to advance towards perfection in the saving, manufacturing, and judging of the comparative value of manures, and in applying them with the least possible waste to crops, will find in this book a vast magazine of suggestions and advice, worth many times its cost and the labor of perusal.

THE SKILFUL HOUSEWIFE'S BOOK; or Complete Guide to Domestic Cookery, Taste, Comfort, and Economy. Embracing 659 receipts, pertaining to house-hold duties, gardening, flowers, birds, plants, &c. By Mrs. L. G. Abeel, New-York: C. M. Saxton—200 12mo pages.

This work, from the pen of a well known and successful authoress, we think the best domestic guide for the young housewife that we have yet seen, and the veteran housekeeper may learn much from it that is useful. It is chiefly a compilation, with enough original matter to give it a character of its own. The selections are evidently the result of judgment and experience.

The "Moral Hints" are not the least excellent and interesting part of the work. As examples of these, the following are about fair specimens:—

"Scolding.—I never knew one who was in the habit of scolding, able to govern a family. What makes people scold? The want of self-government. How then can they govern others! Those who govern well are generally calm. They are prompt and resolute, but steady and mild."

"Politeness.—The forms and ceremonies of politeness may be dispensed with in a measure, in the relaxations and intimacies of one's own fire-side, but KIND ATTENTIONS NEVER."

"Truth.—The heaviest fetter that ever weighed down the limbs of a captive, is as the web of the gossamer, compared with the pledge of the man of honor. The wall of stone and the bar of iron may be broken, but his plighted word NEVER."

"Childhood is like a mirror, catching and reflecting images all around it. Remember that an impious, profane, or vulgar thought, may operate upon a young heart like a careless spray of water thrown upon polished steel, staining it with rust that no after efforts can efface."

A score of pages are occupied with such gems as the above, which we should like every living person to read. The main portion of the book is devoted to directions for cooking, and the various operations of household economy, to a due share of excellent instruction for the treatment of the sick, preparation of simple remedies, and to a vast amount of miscellaneous facts, exceedingly convenient and useful for every woman to know. The price of the book, bound for the mail, is only 25 cents, and the postage but a quarter of that sum.

The Dairyman's Manual, by G. Evans.—We are indebted to the author for a copy of his work, consisting of the history and importance of the dairy, descriptions of the different breeds of cows, the management of the dairy, the diseases incident to cattle, &c. The book is neatly executed, and contains valuable information.

Harper's Magazine for January, contains a biography of Franklin with forty-five illustrations,—follows Napoleon in his Egyptian campaign, and reviews the news of the preceding month. Carlyle and Dickens, each in his peculiar style, cater to the public taste, the one giving his impressions of the opera, the other in a ghost story. The editor's columns display some reflections, as well as amusing anecdotes, while Punch indulges in rare comicalities on the Bloomers.

The International, is improving in matter and style, and is more decidedly American in its characteristics, than Harper's. The January number has some finely executed illustrations of the subterranean scenery of the United States,—a comparison of the poetry of Stoddard and Taylor, and a new poem by Alice Cary. The foreign articles are well selected, and, as a whole, it has no peer in the literary monthlies of the day.

Graham's Magazine, in point of execution, is decidedly in advance of its contemporaries. Its plates are beautiful, and it has a solid, substantial look about it. The contents will speak for itself.

Horticultural Items.

New Pears.—Among the best new pears, which have been to some extent tested are, *Lawrence*, medium size, and of first rate quality, ripening from late autumn into mid-winter, a fine grower; *Doyenne Boussock*, rather large, nearly equal in quality to the best White Doyenne, and a fine grower on quince; *Beurre Langelier*, an excellent winter pear; *Gray Winter Beurre*, (*Beurre gris d'hiver nouveau*,) medium in size, high flavored, a good bearer; *Tyson*, medium in size, melting and high flavored, a fine grower, and one of the very finest late summer varieties; *Autumn Paradise*, (*Paradise d'automne*,) rather large, of the highest quality, resembling Beurre Bose, but in some respects rather superior; and *Dutchess of Orleans*, and *Beurre d'Anjou*, fine autumn varieties. Of those still newer to most, the *Bonne de Zees*, *Ott*, and *Brandywine*, among early pears, and *Suzette de Bavay*, for winter, have proved of high quality.

Western Apples.—B. Hodge, of Buffalo, in an article on the Pomological Congress of Cincinnati, in the Horticulturist, speaks of the high character of *Pryor's Red*, as cultivated in Kentucky, where, according to good authority, it has no superior and few equals. He asks if "any eastern cultivators have fruited this variety?" It has for several years borne fruit in western New-York, where it proves of fine quality, but does not equal in size nor in richness and full maturity of flavor, specimens received from Cincinnati. It appears that a great diversity of opinion prevailed as to the character of the *Cooper apple*, some pronouncing it "coarse and spongy," and "second rate," while others claimed for it the highest merit. The specimens which the writer has received from southern Ohio, although not equal to some of our most celebrated standard sorts in a *high* and *rich* flavor, were remarkable for their exceedingly *agreeable* qualities as a table fruit.

Cutting Down Lists.—Every person familiar with *Hybrid Perpetual Roses*, must have observed a striking resemblance, both in color and appearance, among a large portion of the named varieties. Probably a dozen of the most dissimilar might be made to embrace all that would be required in one garden. It is therefore rather amusing to observe the number embraced in the *reduced list* of Rivers' Catalogue, comprising only *sixty-seven* varieties, while a neighboring nurseryman still keeps as high as a hundred and ten. It is desirable however, not to reduce the list too low, as some excel in hardiness, others in free growth, and others still again in profuse flowering, while some may succeed best in one soil and fail in another. Hence the importance of some chance for selection and trial.

Fruit Packed in Ice.—It appears by a late number of the Horticulturist, that "an American has carried out peaches [packed in tin boxes encased in ice,] and had the pleasure of presenting them to his friends in England, in the finest preservation."

Transplanting a Loaded Pear Tree.—A large pear tree, 34 feet high, with a top 30 feet in diameter, was, according to the New-England Farmer, transplanted when loaded with fruit, without injury. A trench was cut, leaving a block of earth round the tree 12 feet square, and three and a half thick, about and under which a strong and tight plank box was made. A canal was then dug, along which the box was moved 32 feet to its place of destination. The weight of earth was 25 tons—the whole cost of moving, $50. The tree had about two barrels of fruit upon it.

Raising Apples from Cuttings.—One of the latest editions for this purpose, now going the rounds, is the following:—Select the kind of fruit you desire, then take a linen string and tie as near the top as may be—let it remain one season, and you will have one year's growth above the string, and close over it a *bulb* of new wood. Cut the shoot off at the bulb, and set it in the ground, and from the bulb will start out roots, and soon trees of dwarfish size will be seen groaning under a burden of fruit." This is partly correct, and partly humbug. Cuttings of the apple may be made to root in a hot-house and in some tropical countries, and the bulb would doubtless contribute slightly to this end. Add to the above, burying the shoot *under soil* as soon as the string is tied, and roots will soon be thrown out with much certainty. But there is nothing in any part of this work tending to form *dwarf* trees.

Value of the Fruit Crop.—The Commissioner of Patents, judging from statistics in his possession, estimates the present annual value of the fruit crop, at ten millions dollars. Downing thinks that in a few years, when the great number of young trees planted lately, come into bearing, the amount will not fall short of twenty-five or thirty millions.

Over Stock of Fruit Trees.—The editor of the Prairie Farmer, after wide observation, thinks that they of the west will not have enough fruit *for their own use* in much less than 15 or 20 years, so great is the number of trees which die of neglect, or are eaten up by insects. He also gives it as the opinion of the editor of the New-England Farmer, a man of great observation and experience, that at least one half of the newly transplanted trees in Massachusetts are starved to death—one-fourth more devoured by borers, cattle, bad trimming, and other enemies, so that the full proportion of those set, which *never bear an apple*, is three-fourths.

Transplanting Strawberries.—R. G. Pardee gives in the Horticulturist, the result of his experience in transplanting strawberries, on the 1st of June, 1st of July, and 1st of August; the first gives him a large crop the next year; the second, about half a crop; and the third about one-quarter of a crop. This is about in accordance with our own experience.

Apples—good Culture.—The Genesee Farmer informs us that Lewis Burtis of Rochester, has a young orchard, set 5 years, single trees of which have borne, in one case three and a half bushels of Baldwins; two and a half bushels of Rhode-Island Greenings; and half a bushel of Roxbury Russets—all of the finest quality—and all owing to high and attentive culture.

Moss on Trees.—The American Farmer gives the following as an excellent application to the scraped trunk to prevent the growth of moss, and destroy eggs of insects: 1 gallon of soft soap, 1 lb. flour sulphur, and 1 quart of salt, to be well stirred together, and put on with a hard brush

The Cultivator—Improvement of the Mind.

EDS. CULTIVATOR—Allow me, for the encouragement of the readers of your valuable periodical, to speak of some of the pecuniary benefits which I have derived from its perusal; and to make some suggestions, relative to the mental improvement of the agricultural class of community. And here let me remark in order that we may be the more able to judge correctly of the merits of the Cultivator, as an agricultural guide, that I am a young farmer, and always worked on the farm, under the instructions of my father, (whom I ever considered a good practical farmer,) until I was of age; since which time, I have had a separate interest, of about eight years, in a farm of about 35 acres of tillable land. There being no orchard on my farm, at that time, my first business was, to have one growing, as soon as practicable; which is now in a thrifty condition. But could I have had the knowledge, *then*, which I have *since* obtained from the pages of the Cultivator, with regard to the management of young fruit trees, my orchard, with *less* labor than has been expended in its cultivation, would have attained a growth sufficient to have returned, in fruit, more than two hundred dollars, before I shall, now, realise *one twentieth* of this sum.

At that period, there was not a rod of subterranean drain on my farm, although there was not a field which, in some parts, could not be greatly improved by draining. In this branch of agriculture, I had never had any instructions; and the business, in this immediate vicinity, was very imperfectly understood; therefore, I commenced reclaiming those parts, when a surplus of water was found, at a great disadvantage. While in some localities the first crop paid for the expense of draining, in others, the land was benefitted by the drain, *only on one side of it*. I relied for success upon the counsel and experience of those who had been engaged in the business, for a number of years; and whose advice is, "*cut your ditches in the lowest and wettest places*;" which a little science proves to be erroneous. But when the August number of the Cultivator for 1844 appeared, the mystery of some of my drains proving a failure on one side of them was unravelled. What volumes of instruction are reflected from that number on the subject of thorough and effectual draining! From the illustrations and remarks on draining in that number, I immediately discovered, by the application of the principles of geology to the practical purposes of agriculture, that the drains, which had been made, were several rods distant from the place where they *should* have been; and now, in order to secure my crops, for the future, from the injury of surplus water, *another* drain must be made, at an expense of twenty or thirty dollars. And here, allow me to copy from my agricultural notes, taken at that time, on this subject:

"In field number 1, thirty rods of ditch were made at an expense of ten dollars, and proves of little utility to the crops. This field slopes about 4 or 5 inches in a rod; and it has ever been to me, a mystery, why such ground requires draining; but the Cultivator, for the present month, has not only informed me the source whence the water comes, and where is the most correct place to make a drain, which will cut off the water veins, but has been the means of my *unlearning* what I had learned amiss, on the subject of underdraining. * * * The loss of grain, on this ground, by winter-killing, and the expense of making another drain, which is necessary, I may, with safety, reckon at one hundred dollars. So much for the information on two or three pages of the Cultivator." I might speak of other pecuniary benefits which the cultivator has been to me; but I forbear, for fear of prolixity.

To attempt a computation, in dollars and cents, of the value, or benefits which the Cultivator has been to me, in a *mental* point of view, would be the height of absurdity. But I have no hesitancy in affirming, that, could we, by any means, arrive at anything *tangible*, the stipend would double, treble, aye, *quadruple* the amount already mentioned. Its instructions and suggestions have been and are even now, a source of infinite satisfaction to me. It has had more influence in inspiring a desire for correct thought and investigation, on the subject of agriculture, than all other periodicals and books combined.

Who dares make an estimate of the value which the analytical communications, of distinguished chemists, *may* be to me, in saving economically, in correctly preparing, and judiciously applying manure to the soil, for the benefit of crops? Who is able to assure me that the foundation for agricultural education, which has been laid, by the perusal of the Cultivator, will not in years to come, pay for a thousand copies of it, for one year in advance? Who can tell, that the result of some experiment recorded in the Cultivator—some suggestions—some manner of performing certain kinds of labor on the farm, will not prove, in future years, a revenue of many hundred dollars?

But what I have learned from the Cultivator, others may have the equal benefit of. A person of superficial knowledge, passing through the land, could not fail to discover scores of opportunities for the application of science to the practical part of agriculture. There are yet vast and boundless fields unexplored in the grand science of agriculture, which is teeming with so much magnificence and delight, towards the highest state of perfectibility. And if young men would keep pace with the more important improvements of the age in which they live, which are making such gigantic strides, they must labor most assiduously, or they will be left far in the distance. If they wish to be a *nonentity*—a being which the human race would be ashamed to own as one of their numper, and an abuser of heaven's richest gifts, let them relax all efforts—throw off all restraints; and a few years will have accomplished that object. There is no "*jump on and ride*," in the road to usefulness, honor and renown. Every one has a *mind* which he is under obligation to cultivate; and in this day of intelligence, there can be no excuse for any one, who does not avail himself of the facilities for acquiring a respectable education.

Now the Cultivator is most happily adapted to impart aid, to any one, whose motto is *improvement*. The contents of the Cultivator in a good degree are worth *studying*. The novice may here study the *first principles* of agriculture; and the result of such efforts will not fail to improve the mind and the purse.

I am well aware, that young men plead a "*want of time*." But, if there is a *disposition*, perhaps no class of citizens have more leisure hours, and greater opportunities for reading and reflection, than farmers. What great inducements the long winter evenings hold out to the agriculturist, after his daily task is done, to cultivate the mind, and to store it with useful knowledge! It seems as if it was one of the creator's prominent designs, in sending long evenings in winter, that farmers, while the earth is being prepared to yield food for the sustenance of their bodies, might be treasuring in the storehouse of the mind, that knowledge which will tend to make them wiser, and mankind better.

It is, undoubtedly, too true, that most young men, who labor on the farm, hate anything like mental application; and when they are not engaged in manual labor, time hangs heavily upon them. Therefore, as a pastime, they frequent the store, the hotel, or any other place of public resort, to hear the news, tell and hear silly stories; and in many instances, engage in very unbecoming amusements—in ludicrous nonsense, &c.

I would not depreciate the social circle; indeed, it should be the aim of every young man to go into the society of the wise, the intelligent and the good. It is a very important part of education, to know how to *use* knowledge for the benefit of ourselves and others. But the place where the song of ribaldry is sung, and the indecent story told, for the purpose of exciting laughter and the sordid passions, should be, *and will be shunned*, as we would the pestilence, by every one who is desirous of being a useful and respectable citizen, and of leading a virtuous life. The history of the past, furnishes any amount of the most indubitable demonstration, that such practices, eventually lead to *wretchedness* and *ruin*.

What would be thought and said, if our mothers, wives and fair daughters, should embrace every opportunity of spending their leisure hours at some public place of resort, in *gossipping twattle*, or at the *chess-board*?

There are thousands of leisure moments, during the year, of which multitudes make no reckoning; but it is astonishing to consider how much may be accomplished, in the way of acquiring knowledge, by appropriating such moments to a proper use. Moments when *I* have nothing to do, I know nothing of. When I am disengaged from manual labor, which occupies my energies summer and winter, from ten to sixteen hours a day, on the farm, or in the shop, if I am waiting a few moments for dinner, I have something at hand to read. In cold weather, when I come in to warm myself, I snatch up the Cultivator, and in ten minutes or less, a page is read, which will furnish something for reflection while at work. In this way, I have been accustomed to peruse three agricultural papers, three religious papers, one political, Missionary Herald, Home Missionary, a magazine or two, besides scientific and literary standard works. When I sit down for the evening, I have pen and ink at hand; and when a good train of thought is suggested, it is jotted down. If I meet with the chemical name of a substance, with which I am not familiar, I search it out, and learn its use in the practical purposes of life. Mark the paragraphs which are particularly worthy of note; and read them again. Perhaps, pen a few lines connected with the subject. So with the botanical name of a plant: it is looked out in the botany; its common name, class and order, genus and species, &c., are laid up in the store-house of the mind for use, when I am "away from books, and among the flowers."

It will doubtless be said, that "this is rather a slow way of reporting progress." Be it so. It is a *sure* way. And those who have never been favored with a systematic course of instruction, must, like myself, *blunder along* through the world. But none need despair, so long as we are favored with so many illustrious examples, of what a young man *may* be, which have been left us, by many who have risen from obscurity, by their own exertions, to stations of eminence and distinction. What powerful motives are presented, to restrain us from habits of indolence and vice, and to inspire with a laudable ambition, in the history of the many wise and good, who are now sleeping in the dust! Stimulated by the success of the past, let us

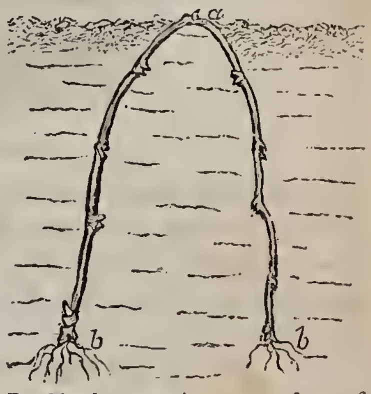
"Work on and win."

S. Edwards Todd. *Lake Ridge, Tompkins county.*

Live Stock in Texas.

A letter from a friend at Matagorda says—"This portion of Texas is divided between the planters and stock raisers; the former occupy the rich alluvial lands of Caney and the Colorado, and the latter the extensive grassy prairies adjoining. Neat cattle here are very hardy, and have never been affected by contagious diseases. They are the descendants of the cattle brought from Spain and the Canary Islands by the early Catholic Missionaries, but they need much to be improved by imported stock. During our wars with Mexico, what between our own commissariat, and the hungry forages of our enemy, our stocks of cattle were nearly exterminated, but a few years of peace under the wings of Uncle Sam's eagle, have caused the cattle to increase to untold thousands. The raising of sheep has just commenced about here; at present there are not more than two thousand in the county of Matagorda. Stocks of cattle are worth three dollars per head, all around. Pasturage costs nothing, and beef cattle can be shipped from a dozen points on this bay to New Orleans, where there is always a ready market. Another source of profit to the small farmers here, is honey bees, which yield an abundance of their peculiar sweets with little trouble and no expense. Mr. Robbins has now about four hundred hives; they stand on the ground, and I believe have never been troubled with insects."

Fruit Trees from Cuttings.



Double bent cutting—*a*, surface of soil—*b*, *b*, new rootlets from lower extremities.

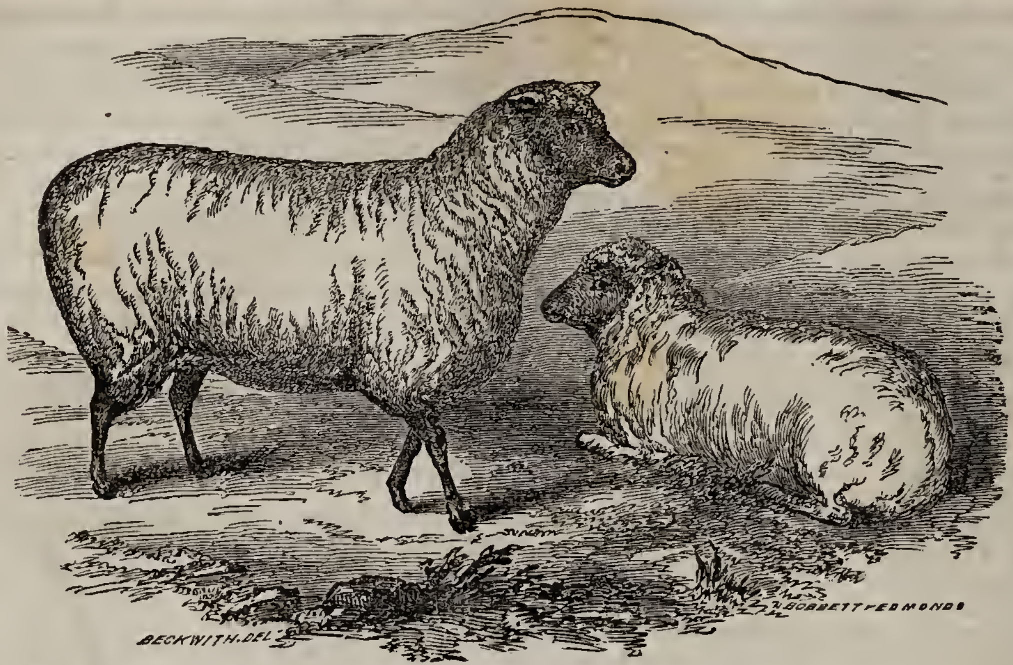
We have never been able to see what great advantage would be gained by being able to raise fruit trees from cuttings immersed simply into the soil, over the common practice of first inserting the cutting into a portion of root, and known as root-grafting—the former being uncertain at best; the latter, when well done, never failing of success. There is, however, a method of treating cuttings, not entirely new, which has been strongly recommended in some of the European journals, which may be highly useful in propagating some kinds of trees and shrubs; and, under favorable circumstances, may be adapted to grapes, quinces, and some other sorts of fruit. It consists simply in bending a long cutting into the form of the letter ∩ inverted, the two limbs being immersed into mellow soil, and leaving one good bud at the summit, at the surface of the soil. In this way, the cut end, instead of becoming the seat of dryness, by evaporation from the open pores, is shielded below by contact with the moist earth. A cut surface at the end will throw off moisture several times faster than the pores through the surface of the bark, and hence the advantage of this method. If desired, one of the arms may be cut off and removed, after the cutting is well rooted, or two made of each one.

The way Weeds Multiply.

Dr. Lindley estimates as a low average the following number of seeds from each of these four plants:—

1 plant	of groundsel	produces	2080	}	16,360 plants.
1	" dandelion	"	2740		
1	" sow thistle	"	11,040		
1	" spurge	"	540		

or enough seed from these four plants to cover three acres and a half, at three feet apart. To hoe this land he says will cost 6s. (sterling) per acre, and hence a man throws away 5s. 3d. a time as often as he neglects to bend his back to pull up a young weed before it begins to fulfil the first law of nature. He recommends every gardener, whose vertebral column will not bend, to count the number of dandelions, sow-thistles, &c. on the first square rod he can measure off. This same operation may be repeated in this country, by applying all the above estimates to the pig-weed, burdock, mullein, fox-tail, chick-weed, and purslane.



South Down Ewes, over two years old, the property of L. G. Morris, Fordham, N. Y.,—received the first premium at the Show of the New-York State Agricultural Society, 1851. Mr. Morris' South Downs have, several of them, been obtained from the noted English breeder, Jonas Webb, and are excellent specimens of that breed, so famous for the production of fine mutton.

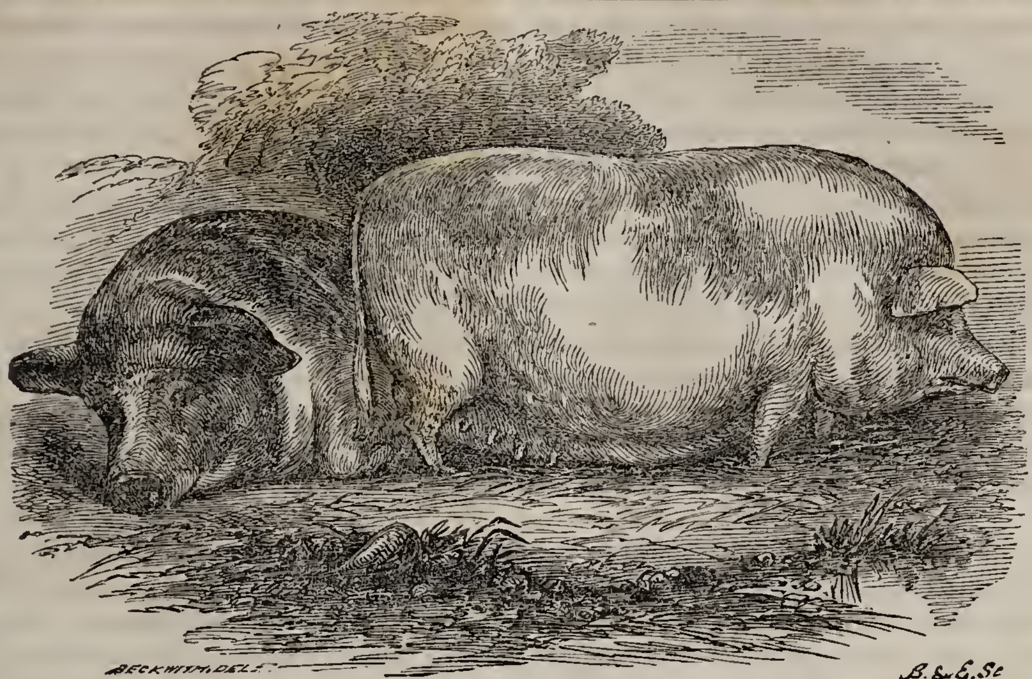
Heavy and Light Wooled Sheep.

Eds. Cultivator—It has become a matter of great importance to the wool-grower to know what kind of wool can be most profitably grown at the present time; and in view of the low prices paid for fine wool, we may well inquire, can we any longer afford to keep fine wooled sheep? The manufacturers and their agents have desired the farmers to hold on to fine sheep, telling them that the time would come when they could make the proper difference; but most people think they have waited long enough, and show a determination as quickly as possible to get a kind of sheep that will yield them a better profit. This is not strange, when we take into consideration the relative profits of coarse and fine wool. Take, for instance, a flock of fine wooled sheep that cut but 2½ lbs. of wool, and some will not do even that; but assuming the average to be 2¾ lbs., and that of the hardy gummy merino, so much in fashion at the present time, which cut from 4¾ to 5 lbs. per head, and allowing the fine to sell for 44 cents, which is about the present price, and the coarser kind to sell for 40 cents, here would be a difference of 59 cents per head in favor of the coarse kind. Now the question is, what are we to expect in future? Will the manufacturers continue to pay almost as much for gum and dirt, as they have heretofore done? If so, they will every year find a great increase of it on their hands, for it is a notorious fact that the kind of bucks now most in demand, are such—at least many of them—that their wool would lose from 30 to 50 per cent in cleansing. The demand for sheep of this description is fast increasing, and will command a far greater price than the finer varieties. In proof of this I would state, that lambs of this grade, from which to raise a flock, consisting of ewes, and some rams, have lately been sold in this vicinity for $2.00 per head, when the finer kinds would hardly bring half the money. Our neighbors in Vermont, with a foresight which seems natural to them, have long been breeding the heavier kinds of sheep, and in many instances have succeeded in attaining a great weight of fleece, many flocks shearing 5 lbs. per head. Now, if in that state, where sheep farms can be bought from $3 to $10 per acre, they cannot afford to grow the finer and lighter grades of wool, how can we here, where land is worth from $25 to $40 per acre. People are beginning to look to their true interest, and will not continue a business that will scarcely pay the expense of keeping and attendance, loss, &c.

Many who kept large flocks of sheep in this county, (Washington,) have quit the business, and gone into the dairy business, which is much more profitable, for when cows are rightly managed, it is not uncommon to realise from $30 to $40 per head. Almost any kind of business will pay better than growing wool at 2½ lbs. per fleece. Potatoes are now being raised in large quantities; and although they may not yield half of what they formerly did, yet with the increased facilitites for getting them to market, they are one of the most profitable crops grown. Flax is also becoming a most profitable business—the quantity sown is annually increasing, and when those newly invented machines for dressing without rotting, shall come into general use, the cultivation of it will probably be greatly increased.

In view of all these things, it may be well to inquire what can be done to save our finest sheep from destruction. I have been in the sheep business for more than twenty years, and wish to continue in it if I can live by it, and keep the quality of the wool up to its present standard, and at the same time increase the weight of fleece. My object in this communication is to obtain information through your columns, where there are any of those fine merinos, such as were common before the introduction of the Saxony sheep, which cut heavy fleeces with but little waste.

Those French merinos lately imported by S. W. Jewett and others, would probably be a profitable kind of sheep, and from samples of wool now before me, from Mr. Jewett's flock, I am inclined to think there wil be



Chinese Swine, the property of JOHN DELAFIELD, Oaklands, near Geneva, N. Y., presented for exhibition only, at the show of the New-York State Agricultural Society of 1851. There are several distinct varieties of swine in China, some of which have a remarkable tendency to fatten, and have been the source of the principal improvement which has been made in the aboriginal stocks of Great Britain, from whence most of our stock has been derived. The Chinese swine are frequently very prolific, producing from twelve to fifteen pigs at a litter. One of those herewith delineated, was suckling thirteen pigs at the time of the show.

less waste in it than in the others noticed above; yet the quality of the wool is far inferior to our best wool in this country; and the cost of these sheep will prevent men of ordinary means from profiting by them, although I doubt not but it will prove a profitable speculation to those enterprising gentlemen who are interested in it. Many who have not yet changed from light fleece to heavy, tell me they will do so next year, but most are desirous of obtaining a finer variety than those noticed in this article.

Any person owning a flock of pure merinoes, with heavy fleeces, with but little waste in the fleece, and who would sell at a price which men with common means could afford to pay, would do well to give notice of the same in the Cultivator, stating the average weight of their wool for some three or four years past, and also the price obtained for it the same length of time; the time of year when sold, and if possible, the amount of waste in cleansing. Could sheep of this description be obtained, to cross with our grade Saxons, we might yet hope to preserve a remnant of our fine sheep from destruction. W. M'C. *West Hebron, N. Y. Dec.* 15, '51.

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Indelible Ink for Marking Labels for Trees, &c.

EDS. CULTIVATOR—I am so much pleased with an article of ink for writing on zinc, made by MR. HENRY H. KELLEY, No. 288 North Second street, Philadelphia, that I am induced to inform you of it, that you may publish it for the benefit of your readers.

It is a black ink, writes beautifully on zinc, and will bear exposure to the weather for many years. It can be obtained of Mr. Kelley for $1.00 per pint.

I know of no method of labelling trees so economical as to cut small cards of zinc, mark them with this ink, and attach them to the trees by a loop of copper wire. JOHN WILKINSON. *Mount Airy Agricultural Institute, Germantown, Pa., Dec.* 6, 1851.

Stock for the Dairy.

Considering the importance of the dairy in this country, it is a matter of surprise thas so little attention is paid to the character of the stock devoted to this object. According to the statistical returns of New-York for the year 1845, the whole number of milch cows in the state, was 999,490. The total produce of butter is stated at 79,501,733½ pounds, and the total produce of cheese, 36,744,976 pounds—equal to 79½ pounds of butter and 36 pounds of cheese to each cow. The greatest quantity of butter, returned from any one county, where no cheese was mentioned, was 110 pounds, from Kings. The greatest quantity of cheese per cow, returned from any one county, was 226 pounds, from Herkimer; but it is probable that some butter was produced from the same cows, in addition to the cheese. From the township of Fairfield, Herkimer county, 350 pounds of cheese were returned per cow. The dairy produce of cows, in quantity and quality, depends on their natural constitutions, and the treatment given them in reference to food and other requisites. Both these points should receive from dairymen the strictest attention, if they expect to receive the greatest profit. Every farmer may know that there is a great difference in the constitutional properties of animals. Some, from an inherent principle in their organization, can produce from a given amount of food a greater amount of flesh, or fat, than others; some yield a greater quantity of milk or butter, under the same circumstances. It may have been noticed that these constitutional traits are, to a certain extent, hereditary, and that families or breeds are characterised by peculiar propensities, which greatly effect their value for special purposes.

The difference in the amount of butter yielded by cows in the same dairy and subjected to the same treatment in every respect, often amounts to 100 per cent—some giving not more than four or five pounds per week, and others ten to twelve. In most dairies, it is reasonable to believe that, if all the cows were equal in quality to the best in the herd, the quantity of butter would be increased at least one-third. But suppose attention to the breed, or constitutional qualities of cows, should result in an increase of only one pound per week for each cow in the state, for six months of the year,—it would give a yearly increase of 25,986,740 pounds, which at only twelve and a-half cents per pound, would give the immense annual return of $3,248,382½. When it is considered that this is but for one state alone, some idea may be had of the vast benefits which would result to the whole country, from an improvement that might readily be attained in milch cows.

The systematic breeding of cattle with reference to the dairy, or with that as a *primary* object, has scarcely been attempted in this country, until within a late period, and indeed has not been extensively practiced in Great Britain,—the great aim of the most eminent breeders having generally been the development of the fattening principle, beef being in England an object of more consequence than butter and cheese. It is, however, gratifying to see that the establishment of breeds for the dairy is now beginning to be regarded as essential to the progressive improvement of farm husbandry, and it cannot be doubted that the proper application of the laws of animal economy, will be attended with as great success in this department, as has been realised in breeding for other purposes.

A Farm in Western New-York.

Eds. Cultivator—I am induced to give you a description of a 600 acre farm, lately purchased by Hon. Allen Ayrault of Geneseo. It is situated near Mount Morris; one half upland, gravelly and sandy soil, the other half flats divided about equally by the Genesee Valley canal. When Mr. A. first came into possession of the first part of this farm, 100 acres, it was very much impoverished by constant cropping—receiving but a very illiberal share of manure. Since that, he has purchased 200 more adjoining. It is astonishing to see the contrast, the road only dividing the two purchases. The former has been occupied by Mr. A. four years, the other he purchased this spring with the crops. On one side the surface is covered with beautiful waving crops, the other with the most pernicious weeds and miserably light crops. Mr. A. intends to make this a valuable farm by a proper mode of cultivation. He has numerous never-failing springs on the elevated land, which supply his fields below and his barn-yards and stables, with a constant stream of water, both winter and summer. Many of his fields are supplied with spring water by a penstock in the corner of a field, for the use of two or more lots. A small peg is taken from either side of it to suit the convenience of each.

He has built a large barn, to which is attached a stable for fattening cattle, a stall being provided for each animal, with a gate to enclose him. Here he lies loose on a thick bed of straw, which absorbs all the urine; he sleeps at his ease, and gets fat at his leisure, being well supplied with well cured "*early cut hay*," and an economical portion of Indian meal. Indian corn can be grown on the flats in abundance. Mr. A.'s stock of cattle are promising; some Herefords, Short-horns, and grades; sheep a cross with the Leicester and Cotswold. He has a white breed of pigs, of which he keeps about 75 in number, which I should say were tolerably good, but not equal to the Berkshire or Leicester for profit. A number of sows with their pigs are lying in a clover field adjoining the house, in which there is a small pen made for the young ones to get in, and they are there fed with corn in the absence of their mothers. These are destined for the Brighton market, when weighing about 50 to 75 lbs. each, where they meet a ready sale at remunerating prices.

Mr. John Ayrault, a nephew of Mr. A.'s, has the management of this farm, and a very enterprising young man he is. I think he is on his way to become one of the *few good and thorough farmers*. He possesses good judgment in cattle and tillage; and his system of neatness and economy will in a short time rank his farm amongst the best. He is growing roots of various kinds to test the value of each, and intends by careful observation to prove the feeding quality of each variety. The noted Skirving Swede turnep is amongst the number in this experiment. I have always placed a high value on this root, and if Mr. A. is successful in growing them, it will afford a sample for the public to judge from. It is my impression that more beef and mutton can be made per acre from this bulb than any other root.

Mr. A. has a large cellar under his barn, capable of storing a great quantity. A door opens into his feeding room very conveniently for the herdsman. Every animal on the premises is kept in the highest condition, but economy in the management of food is strictly adhered to. There is a small "American Cottage" near to the barn, of which Mr. Ayrault was his own architect. It is sheltered by a hill of picturesque shape, adorned by the forest above it. This is improved by the woodman's axe and spade, under the guidance of Mr. A.'s good taste. A winding carriage road leads through the wood, and when you reach the summit of the hill it commands a view which for beauty cannot be excelled in this country. The Indians lingered long on this spot, and it was a favorite resort for them, a circumstance which is pretty good proof of fertility.

We had quite a spirited plowing match at Geneseo a few weeks since, on the farm of Mr. North. The furrows were straight, deep, and well turned, but I cannot reconcile myself to say they were sufficiently *narrow* to be called "*scientific.*" I am fully convinced that a narrow furrow is very important on sod ground, more especially when Indian corn or other grain is put in with only one plowing. I am inclined to believe that clover sod plowed *narrowly* once, in August, is as good for a crop of wheat, as summer fallow. The thistles and other weeds must be kept down. Wm. H. Sotham.

Greenwood Cemetery.—This celebrated cemetery, near New-York city, which taken altogether, is regarded as unsurpassed by anything of the kind in the world, has we are informed, employed of late about three hundred persons constantly in the preservation and improvement of the grounds; which will give some idea of their extent and keeping.

Plows should Pulverise the Soil.

The pulverisation of the soil—or especially tenacious soil—is of great importance to the development of its capabilities for the support of a crop. Hence in plowing, it becomes a matter of the highest consequence to obtain the implement which will most perfectly effect this object. In the trial of plows by the New-York State Agricultural Society, in 1850, this was regarded as one of the most essential points, for "stiff soil," and we are glad to see that it is receiving much attention in England. Mr. PETER LOVE, an English farmer of considerable distinction, has written a letter to the *Mark-Lane Express*, in which he makes some excellent remarks on the action of plows in reference to the purpose alluded to. He says:

"If it be the fact that the primary object of cultivation for the production of the various agricultural crops, is a well pulverised soil and porous subsoil, then the farmers ought to draw out the ingenuity of our agricultural mechanics, by giving prizes for those plows that will invert without smoothing and smearing the under strata, and most effectually pulverize the greatest quantity of land a given depth with the least amount of power, instead, as the present practice is by all our agricultural societies, awarding prizes to those plows that cut out a furrow with all three of its cut sides well smoothed and smeared up, and turned over in as unbroken a state as possible, so that it will shine from one end to the other, like a well moulded piece of concrete, and the bottom of the furrow well polished over by the friction of a broad soled landside and wrest, thus rendering the under strata almost impervious to either air or water.

"If we could have a plow so made that it would, in the act of inverting the furrow-slice, break it into pieces, and pass over the bottom of the furrow without the friction of any smooth surface of iron or other material being drawn over, closing up all the pores and fissures in the under strata, I think there is little doubt but such a plow's cultivation would approach (when performed at equal depths) fork cultivation.

"There are a great many of the best farmers who are of opinion that it is a great advantage to have the furrows turned as completely over as possible. But the great evil is that when the plow is set to turn the furrow so, the solid furrows require so much harrowing to prepare the land for the dibble or the drill; but such would not be the case if we had plows that in the act of turning over the furrow would well crack, rent, and break it, and completely invert it, and cut it up from the under strata without smoothing the bottom of the furrow, closing all the pores and fissures thereof."

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Cultivation by Steam.

An interesting article was published in The Cultivator, from the Ag. Gazette, on the proper mode of applying steam to the purposes of tillage. The author of that article has written several others on the same subject, which have appeared in the journal before mentioned, one of which contains the following ideal description of the machine which he supposes is destined to take the place of the common plow:

"Before you depart this life, you will see one more wonder moving upon the face of the earth, something of this form and fashion—to wit: A complete locomotive engine on four wheels, with tires 10 inches broad, and slightly corrugated cross-wise on the face, the fore wheels turning on a transome, the hind ones fixed; behind them (suspended) a transversed, cylindrical shaft, three feet in diameter, from six to eight feet long, reminding you of a cross-breed between a clod-crusher and hay-tedding machine, armed with case-hardened steel tine-points, in shape like a dog's claw, each tine-point alternately long and short, so that the side-lap of each claw may cover the work of the other, and no interval or ridge be left unrent: the extremities of the cylinder just covering the wheel tracks. This formidable looking cylinder of claws, you will see raised or depressed at pleasure by the engine driver, and adjusted to slow or rapid revolutions, not worked by clog-wheels, but by one of the new metalic bands, geared from the drum of the engine. That is the 'Cultivator.' A platform from the engine extends over it, ending in a sort of movable tail-board, which may be raised or depressed at pleasure, to regulate the settlement of the soil which scatters from it. The revolution of the cylinder is not *against* but *with* that of the wheels, not dragging or retarding, but helping the advance of the whole machine, which is moved slowly forward (about half-a-mile an hour) by a detached force of about two horse-power, from the same engine."

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Farmers' Families.

Major PATRICK, in his address before the Jefferson county (N. Y.) Agricultural Society, gave the following advice in reference to the improvement of farmers' families. Speaking of the practice, which prevails in some families, of keeping a portion of the dwelling almost wholly closed, he said—

First: let the *front* part of that house be thrown open, and the most convenient, agreeable and pleasant room in it be selected as the *family room*. Let its doors be ever open; and when the work of the kitchen is completed, let mother and daughters be found *there* with their appropriate work. Let it be the room where the family altar is erected, on which the father offers the morning and the evening sacrifice. Let it be consecrated to neatness, and purity, and truth. Let no *hat* ever be seen in that room on the head of its owner; let no *coatless* individual be permitted to enter it. If father's head is bald (and some there are in that predicament,) his daughter will be proud to see his temples covered by the neat and graceful silken cap that her own hands have fashioned for him. If the coat he wears by day is too heavy for the evening, calicoes are cheap, and so is cotton wadding. A few shillings placed in that daughter's hand ensure him the most comfortable wrapper in the world; and if his boots are hard, and the nails cut mother's carpet, a bushel of wheat once in three years will keep him in slippers of the easiest kind. Let that table which has always stood under the looking-glass, *against the wall*, be wheeled into the room, its leaves raised, and plenty of useful (not ornamental) books and periodicals be laid upon it. When evening comes, bring on the lights—and plenty of them —for sons and daughters all who can—will be most willing students. They will read, they will learn, they will discuss the subjects of their studies with each other; and parents will often be quite as much instructed as their children. The well-conducted agricultural journals of our day throw a flood of light upon the *science* and *practice* of agriculture; while such a work as Downing's Landscape Gardening, laid one year upon that centre table, will show its effects to every passer-by, for with books and studies like these a purer taste is born and grows most vigorously.

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To Destroy Calamus or Sweet Flag.

EDS. CULTIVATOR—In reply to your correspondent who inquires as to the best mode to destroy "Calamus or sweet flag," I would say that I succeeded in destroying a strong growth of it, by repeated plowings and harrowings for two successive seasons. It is necessary however, to drain the land on which it grows thoroughly first. WILKINSON. *Mount Airy Agricultural Institute, Germantown, Pa., Nov.* 1, 1851.

No man has ever regretted that he was virtuous and honest in his youth, and kept aloof from idleness.

Lightning Rods—Protection of Barns, &c.

Eds. Cultivator—The common opinion is, that a lightning rod attached to a barn or other building, is intended to receive the shaft of lightning after it has left the cloud, and conduct it harmlessly to the ground. This it may do sometimes, but I am clearly of the opinion that this is the smallest service that it renders. I propose in this paper, to enter into the subject at large, and to examine it thoroughly, with a view to its more clear elucidation, for the benefit of farmers and others. The cause of a thunder storm, is a disturbance of the equilibrium of the electricity of the earth and the atmosphere. Thus, if a cloud be more highly charged with electricity than the earth beneath it, there is a disturbance of the equilibrium, the cloud becomes positively and the earth negatively charged, in relation to each other, and an explosion or discharge from the cloud to the earth will necessarily take place, unless some medium be provided for conducting the excess of the fluid from the cloud to the earth. A damp atmosphere between the cloud and the earth, connecting them, will accomplish this. And in all cases of this disturbance, there must necessarily be a stratum of very dry atmosphere between the cloud and the earth. Let us suppose a storm approaching. A heavy black cloud approaches rapidly from the northwest. It is highly charged with electricity. Every body expects a thunder storm. Now, the question is, how can this threatening storm be prevented? I believe it can be in all cases. The prime conductor of a powerful electrical machine, represents an over charged cloud. A powerfully charged Leyden jar, represents the same. Now, when either of these are fully charged, if you hold with your fingers the point of a needle towards them, you will gradually, and insensibly, discharge them. If you are smoking a segar, and approach the burning end of it near the jar of the conductor, you will effectually discharge them through your own body, unfelt. Whereas, if you approach either with a blunt object, say the knuckle of the finger, you will in the case of the conductor, receive a sharp spark—a miniature streak of lightning; in the case of the Leyden jar, a violent shock. On this principle I have taught many a little girl to play tricks with the powerful electrical machines at the museums. I direct them to hold a needle, or even a pin, between the knuckles of the fingers, the point only projecting to a level with the apex of the knuckles, so that it will not be seen; and as the operator turns his crank to get up a charge, hold the knuckles within an inch or two of the prime conductor. If she do this, in vain shall the operator strive and labor to get up a charge. If she allows him to get the conductor fully charged, and then hold her knuckles, with the pin between them, to the prime conductor, say within an inch, it will be immediately discharged—and the operator is struck with wonderment, being unable to account for the failure of his experiments. So, also, shut the fingers of the hand closely, and let the knuckles represent a row of houses. Place a sharp pointed pin or needle between the two middle knuckles, the point not higher than the knuckles. Now hold the knuckles towards the prime conductor, approaching ever so closely, and there will be no spark seen, however vigorously the machine may be worked; but, without withdrawing the knuckles, merely relax them so as to drop the pin, and instantly the knuckles will be struck by the spark. You may use the pin in any way you please, and you cannot *attract to it a spark;* but you can discharge the prime conductor of the Leyden jar of all its excess of electricity, as before described. In these cases the excess of electricity passes over the point of the pin, and the body of the person holding it, unseen and unfelt. When these experiments are performed in a very dark place, the point of the pin is seen to be very luminous while the conductor is being discharged.

Now, what is expected to be elucidated by these experiments in relation to the subject of lightning rods, is this:—The great prime object of a lightning rod, is to form a medium through which the equilibrium of the electrical state of the earth and air may be re-established, or its disturbance prevented. Suppose a cloud to be approaching, heavily charged with electricity, directly over a barn filled with the fresh harvest. If that barn be provided with a good lightning rod, it may by chance be protected by the rod receiving the shaft as it descends. But suppose several good lightning rods were erected at a distance to windward of the barn, they would effectually discharge the cloud of its electricity before it reached the barn. And here permit me to remark, that I believe a lightning rod affords more protection to some neighbor's buildings to the leward of it, than it does to that on which it is situated. According to my ideas of the laws of electricity, the proper protection of farm buildings should consist in the erection of lightning rods on several very high trees, or other elevated objects at a distance of at least a quarter of a mile from the buildings, in such directions from them as such storms usually come from, say, north, north-west, west, south-west, south and south-east. I would also erect lightning rods on all the buildings, for special protection. If a dozen lightning rods were thus erected on a farm, and properly adjusted, I do not see how it would be possible for the buildings on the farm, or anything else, to be struck with lightning.

The reason why so many barns are struck by lightning every summer, is very obvious. We rarely hear of an empty barn being struck. Barns filled with the freshly gathered harvest, are the usual victims. The reason is, there is a large column of vapor passing upward from the barn, and presenting to the over-charged cloud a large blunt point of attraction. This column reaches an altitude much higher than any lightning rod can do. It is a very powerful attractor of electricity. (This may also be illustrated by holding the mouth within a couple of inches of the prime conductor of an electrical machine, and breathing upon the conductor, which will immediately discharge it, insensibly to the operator.) Hence, as the cloud arrives over the barn, with its load of electricity, the column of vapor being the nearest object of attraction, causes an explosion, or streaks of lightning. If this column could have been prepared with a sharp metallic point, it would have discharged the cloud without an explosion. In this connection it becomes important to observe that the grain and hay should be made as dry as possible before it is placed in the barn or large stacks. If it were perfectly dry, the barn would be in no more danger from lightning than any other building.

The above theory applies with equal force to all cities and villages. It is believed that one hundred lightning rods properly arranged, (and of this we will speak presently,) would effectually protect the whole city of New-York against lightning. Suppose such should be erected on Long-Island, on the heigts of Brooklyn, of Hoboken, on all elevated places around the northern suburbs, at suitable distances and throughout the city, especially upon all high buildings, steeples, towers, &c.? If such were done I do not see how it is possible for any house in that city, or anything else to be struck by lightning, because every cloud, from whatever quarter it might approach, would be effectually deprived of all superabundant electricity before it could reach the city. These rods would not only form mediums for equalizing the electricity in the case of overcharged clouds, when the earth is in the condition of a negative to the positive cloud, but in the reverse condition, when the earth is positive and the atmosphere or cloud, negative. They would form conductors equally as well one way as the other. I know of no outlay that a city or village could make, that would be more judicious than this; and the farmer, certainly, cannot safely dispense with it. But the position of the rods is not the only point of importance. The manner of their arrangement is essentially *the* point of greatest moment, and we will now proceed to discuss that.

A lightning rod,—its material and manner of construction or erection, is the simplest thing in nature or mechanics. Let us develop the principle upon which it acts. The earth is a large body, always charged with electricity. Some have called it a generating battery. The atmospere, and its vapors or clouds, is also a large body of matter always charged with electricity. But, owing to their different densities and compositions, these two bodies are always in different states of electrical condition. Sometimes the earth is more highly charged than the atmosphere; but this is rare. . Very often the atmosphere is more highly charged than the earth. Whenever either of these relations exists, there must necessarily be a non-conducting medium between the earth and the atmosphere, or at least between the clouds and the earth, in the form of a stratum of nearly perfect anhydrons or dry atmosphere. Now, to equalise the electricity of the earth and the atmosphere, we have only to form a medium, through or over which the surplus electricity of the one may pass to the other. Doctor Franklin discovered how this might be effected. He raised a simple kite, armed with metalic points, and fastened to the earth by a wire. This brought the lightning from the clouds. This disarmed the clouds of their lightning. The metal of the kite attracted the electricity of the cloud, the sharp points divided its current, so that it passed down the wire harmlessly. This was the first lightning rod, and illustrates the principle upon which it acts, viz: a continuous metalic medium from the earth to the cloud, or near it. Now, a perfect lightning rod must, therefore, be connected with the earth *perfectly*, and ascend as near as may be to the cloud, with *a perfectly sharp point*. A perfect connection with the earth can be effected by sinking the lower end of the rod to a depth that will ensure perfect and perpetual moisture. In some situations ten or fifteen feet deep will be required, in others four or five will be sufficient, owing to the different constituents of the earth at the place. It would never be safe to allow the lower end of a rod to rest in a sand bed; that must be passed through, though an hundred feet were penetrated. When a situation of permanent and perpetual moisture is obtained, that is the depth to sink the lower end. And even then, a few feet square of copper sheeting should be soldered to the end of the rod. Some require a deposite of pulverised charcoal to be placed at the bottom, in which the end of the rod is to rest. I would recommend, if charcoal be used at all, which I do not consider necessary, that it be mixed intimately with the earth at the bottom. It will serve to retain moisture in very dry seasons. The rod must be a single continuous rod, of round iron, three-eights to half an inch diameter. It must be so long that it will reach from its deep insertion in the earth to the highest point above the house at which it can be sustained. It should be carried up within six inches, not less than four inches, of the house, and must be supported by some non-conducting substance in the course of its ascent, such as horn or glass. It should not be placed near nails or spikes, that is, no nails or spikes should be in the house directly behind the rod. Its upper end must be brought to a *perfectly sharp point*. This is of the utmost importance, because the sharper the point the more easily will the fluid be divided by it. In this connection it must be borne in mind that it is the division of the current by the sharp point that prevents the shock; and that it is the presentation of an obtuse or blunt surface that produces it. Bear in mind, also, that it is the interruption of the current in all cases of electricity, that causes shocks. The sharp point avoids this, and hence, as has been shown in previous remarks, the heaviest charged Leyden jar, may be discharged by an infant with the point of a pin. And the sharper the point, the more perfect will be the discharge insensibly. To ensure this the point should be composed of *platinum*, on which metal the atmosphere has no effect. A cap of thin sheet platinum an inch or two long, drawn to a point, and soldered upon the iron rod, is sufficient.

The old fashioned method of connecting several rods by a kind of hook and eye connection, is all wrong. Rust may and certainly will interfere to break the connection,—for it must be borne in mind that the oxyde of any metal (rust,) is a non-conductor of electricity. The whole rod must be made of one continuous rod of iron. This may be effected by perfectly welding the several pieces together, till you have the length required. In its connections for support to the house nothing but perfect non-conducting materials should be used. Clamps of wood with a section of horn or a ring of glass for the rod to pass through, are good contrivances. The higher the point of the rod is elevated above the highest part of the house, the more protection will be afforded. From casual shafts of lightning it is calculated that an elevation of the point, four feet above the highest part of the house, will protect the house to the distance of eight feet each way, and that an elevation of eight feet will protect it to a distance of sixteen feet each way. The rule should be however to elevate the point of the rod as high as it can be supported against the wind, for the higher it is the more protection it will afford. Let me once more caution against jointed rods and placing the rod opposite nails or spikes or any metalic substance, as these may attract the current from the rod. I would also caution against branch rods; that is, several rods above leading to a single rod below; and also against horizontal rods, running a distance along the roof or top of a house or tower, to the perpendicular stem;—its nature is to descend to the earth, and the horizontal rod affords an unnatural medium; they may pass over a nail or spike which would be very likely to attract the current and discharge it in the house. The rod may be painted black or left without paint at the option of the builder. It makes no difference.

A word as to the nature of electricity. Many if not most people suppose that lightning is *fire*, of course that it is hot. This is not so; it is cold, or of the temperature of the surrounding atmosphere. But it is matter, commonly called a fluid, and by its rapid passage through the air produces the appearance of fire *in the atmosphere*, by its friction, and in passing over wood or metal, ignites the one and melts or fuses the other by its friction merely. Franklin did not draw fire from heaven, as he is generally credited with having done, but he drew down a current of electricity, in a cool state, and did it so coolly that he did not even burn his fingers with it. How often do we see a green tree that has been struck by lightning, one side of it exhibiting the track of the fluid shivered into splinters. A dry tree is often set on fire by the friction. A barn is also set on fire by the friction; and nails and other metalic substances are fused; but still the fluid itself is cold. G. B. Smith. *Baltimore, Dec.* 1851.

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Dairy Business on the Western Prairies.

Eds. Cultivator—Whilst canvassing the fertile plains of Illinois and Iowa, in the pursuit of agricultural information, no branch of farming received greater attention than the management of the dairy. Some very unexpected developments were strongly presented to notice, all of which were highly favorable to the profitable prosecution of the dairy business on the prairies; and for the benefit of the patrons of the Cultivator, a plain practical digest of the subject will be prepared for this and future numbers, in the hope that it will be the means of attracting public attention to a great interest, which has been comparatively overlooked by those who patronise the agricultural literature of the Union.

In the principal cheese districts of New-York and Ohio, the value of freehold property has been for the last fifteen years, gradually on the increase, until it has at last reached a point beyond which it cannot advance unless the products of the dairy obtain a corresponding increased value; which result will scarcely happen so long as an abundance of cheap and fertile western lands are in the market. The value of land adapted for the dairy business, on the upper branches of the Mohawk, may be rated at $40 per acre; in Western New-York at $25 to $35, and on the Western Reserve, Ohio, at $20 per acre. The wholesale value of cheese compares very nearly in value at those several points, with the difference in the value of the land, which is occasioned mainly from the difference in the quality of the article, and not through local influences or demand. The best cheese in the Union is manufactured in Herkimer and the adjoining counties; that which rates next in quality is produced in Western New-York, bordering those streams that flow into Lake Erie; and the next is manufactured in the north-eastern counties of Ohio. Celebrated brands in the two latter dairy regions, will favorably compare with the finest specimens produced in Herkimer; but in the main, the position here taken in regard to the relative comparative quality of the products of those districts, hold strictly good. We have on former occasions taken much pains to investigate the causes which produced the vast difference in quality of cheese and butter, in different districts; and although soil, character of herbage, and water for stock have much to do in the production of a good or bad quality of dairy produce, yet the management of the business itself, in nine cases out of ten, stamps upon the character of the article, either its bad or good qualities.

So far as the natural adaptation of the western prairies are concerned, it is safe to conclude that a superior article of cheese and butter could be produced. which would in every particular compare with the most celebrated dairy products of the Union. Occasional instances may be met with in travelling through Illinois and Iowa, where the articles of butter and cheese are decidedly superior in quality, but these are exceptions to the general rule, and indeed, it rarely happens that a traveller can meet with a sample of either at the public hotels and boarding houses, that would pass inspection in any of the leading markets in the country. It is idle to expect that the present population of the west will do much towards establishing a high character for the dairy; and to our mind, the best chance to effect that object, would be to fairly bring the claims of the country, for the business, before the attention of eastern dairymen. Much pains will be taken to effect that object in future numbers of the CULTIVATOR, so that the readers may correctly judge of the adaptation of a prairie country for the profitable prosecution of the dairy business.

There are many features connected with this important subject, that should be known by all who may have any desire to transfer their operations from high priced lands to those of a nominal value, and without fully enlarging upon the details at this time, a synopsis merely, will be given, and an early opportunity will be embraced for the more full development of the matter.

Prairie grass will produce as good a quality of milk and cream, as the cultivated grasses, though not quite so abundant. Cows are exceedingly partial to it, so much so that they prefer it to all other description of pasturage, and for at least four months in the year it is quite as reliable as either timothy or clover. Cows, as well as all other description of horned cattle, and horses, may be tolerably well wintered on prairie hay, at a merely nominal cost; but it is obvious that the main cause of the deficiency of milk in summer, may be attributed to the almost exclusive use of this description of winter provender, and the absence of esculent food; and not to the deficiency of nutritive properties in prairie grass for summer pasturage. Summer ranges for cattle, for a very long period to come, will be so abundant, that the stock will not have to travel to an inconvenient distance from the farm buildings, if they be judiciously located. At the head of all the streams, both in Illinois and Iowa, the prairie and timbered land are about equally distributed, and neither, in those regions are found in large bodies lying contiguously together. The country at those points presents a beautiful and undulating appearance, so equally diversified in hill and vale, with an abundance of never failing springs, and comparatively no swamps or waste lands, that at no distant day it must become occupied by an industrious and intelligent class of eastern farmers, who will introduce not only a superior system of dairying, but will also engraft upon western agriculture the most approved systems of management included within the entire scope of a mixed system of husbandry. The price of butter and cheese is fully 30 per cent higher in the western markets than in the eastern, and can be produced at one half the cost. With these, and other powerful reasons, we shall at some future occasion bring this important subject more prominently before the American public.

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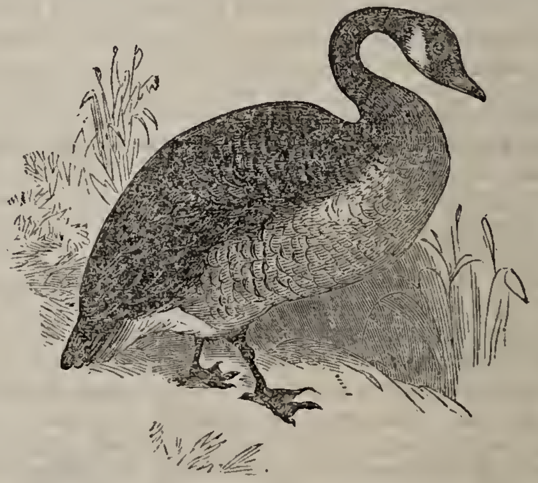
The Canadian or Wild Goose.

This interesting bird, though easily domesticated to such a degree that it will breed in its captive state, yet always, or at least for many generations, possesses something of the migrating instinct inherent in the species.



They are frequently restless, and disposed to fly at those seasons when the wild geese make their semi-annual journeys. They call to their brethren which happen to pass within sight or hearing; and if the tame ones are disabled from flight, (as is done by amputating one wing at the outer joint,) the wild ones not unfrequently alight to reconnoitre. If a wild flock is bewildered by having lost their leader, as is sometimes the case, they have been known to be so attracted by domesticated ones of the same species, that they have been easily shot, or even taken alive. Col. JAQUES, who keeps this bird in his collection, near Boston, states that flocks of wild geese have several times alighted near his poultry-yard, and although near a highway which is constantly traveled, they have sometimes remained for a whole day, no molestation of them being permitted.

List of Varieties of Apples.

Information is asked by a correspondent relative to the best varieties of the apple for an orchard. Those most highly esteemed throughout the country, so far as tried, are the following:—*For summer fruit*—Early Harvest, Red Astrachan, Sine Qua Non, Sops of Wine, Benoni, Summer Sweet Paradise, American Summer Pearmain, Sweet Bough, and, when highly or richly cultivated, Williams' Favorite. *Autumn fruit*—Autumn Strawberry, Gravenstein, Porter, Lowell, Dyer, Fameuse, Hubbardston Nonesuch, Rambo, Belmont, and Fall Pippin, the four last keeping at the north through a large part of winter. *Winter varieties*—Rhode Island Greening and Baldwin, for profuse bearing; Swaar and Esopus Spitzenburgh, for rich or high flavor; Red Canada and Northern Spy, for agreeable pleasant quality late in spring; English and Roxbury Russets for even surface and long keeping; Newtown Pippin, for high quality and high price, when subjected to very rich culture; and Ladies Sweet, Tallman Sweet, Broadwell, Danvers, and Sweet Baldwin, for winter Sweet apples. Peck's Pleasant, a fine early winter variety, exceeds nearly every other in the uniform fairness of the fruit through all seasons. The Yellow Bellflower and Jonathan, the Vandevere and Westfield Seeknofurther, should not be omitted in a complete collection of good winter apples; and Rawle's Janet and Pryor's Red will be regarded as indispensable at the Southwest.

Education Necessary for the Farmer.

The opinion is very general that farmers need no more than a common school education—that a college or academical education, to them would be useless—nay some even aver that a college education, instead of being advantageous to a young farmer, would be highly detrimental, by engendering habits of laziness, and unfitting him for the laborious occupations of the farm. True, if the boy has not been taught to work, he will dread work when a man—hence work should also form an important part of his education, nor is there any necessity of the entire period of youth being spent in fitting for, and going through college, or that a degree should be obtained so soon. There is, in this country, too great haste to usher young men upon the stage of action, there being a striking difference in that respect between us and Europe. No matter if the young man is even thirty, before leaving college. If industrious and prudent, he will be better fitted to enjoy happiness and act his part on the farm, than a farmer of the same age brought up without any taste for reading. We assert that if any many needs a college education, it is the farmer. He needs it, not to make money and acquire what is termed a good living—that is enough to satisfy the physical wants of his nature, but he needs it to gratify the wants of his mind. There is no class whose physical wants are better supplied than the farmer: but the mind, that which alone renders our enjoyments superior to the brute creation—how little food, how little enjoyment is provided for it? Acre after acre is bought, and dollar upon dollar is put out at interest, but few or no books are bought or newspapers taken.

There are few farmers who would not consider it the height of extravagance and folly to buy a library of five hundred volumes—a telescope costing one hundred dollars, and a barometer or microscope. They would much prefer to have the cost of the above in money at interest —and why? Simply because their education unfits them to enjoy books or scientific instruments. There are few who will deny that the farmer with the library, telescope, barometer and miscroscope, and the knowledge necessary to appreciate and use them, has more of the elements of happiness at command, than an unlettered agriculturist who has thousands of dollars at interest. The former has materials for enjoyment at home—the latter has money at interest. I once knew a childless old farmer, with a large farm, and many thousand dollars at interest. He was fond of reading. He only took a county newspaper costing one dollar a year, and borrowed other newspapers. I once asked him to subscribe for a city paper at one dollar a year. He said he was much pleased with the paper, and he intended to take it, but he would wait another year, and perhaps congress would reduce the postage, and then he would subscribe for it. Poor man! (mentally) to save eight cents, the difference in postage, he deprived himself of the Evening Post one year, nor did he ever take it.

If we travel among farmers, we meet with few libraries, and little literary or scientific taste. Nothing has tended more to bring about this state of things than the impression that a college education is useless to the farmer—the man who above all others is best calculated to enjoy such an education—because he has most leisure which could be devoted to literature or science without the least detriment to his farming business—nay that would be benefitted with such an intelligent guide at the helm.

Thanks to our agricultural papers, the prejudice against a liberal education is rapidly wearing away, and men are becoming more and more convinced that a good classical and scientific education is highly advantageous to the farmer. S. B. Buckley. *West Dresden, Yates county, N. Y., Dec.* 1. 1851.

Wheat and Chess.

Eds. Cultivator—Without either the ability or inclination to discuss the chess question, permit me to state a couple of facts which took place under my observation. Some eight or ten years since, my father purchased one of Gilbert's fanning mills, which were then considered the best in this section. Previous to that time, we were much troubled with chess; but after using the new mill two or three years, the chess had pretty much disappeared. A little previous to the last harvest, as I was walking near one of our wheat fields, my attention was attracted by a very large stool of chess, growing in the edge of the margin of the field. After pulling it up, and satisfying myself that it formed a single stool, I counted the stalks, and found it contained one hundred and five. Allowing twenty grains to the stalk—and I think this a moderate calculation—and we have more than two thousand fold. From these two facts, I drew as many conclusions. The first is, that a good fanning-mill is a capital anti-transmutation machine; and second, that chess, from its immense power of reproduction, requires pretty close watching. J. M. *Throopsville*, 1851.

Annual Meeting of the N. Y. State Ag. Society.

The Society convened at the Assembly Chamber, at 12 o'clock on the 21st—John Delafield, Esq., in the Chair; B. P. Johnson, Secretary.

After the usual opportunity for the admission of Members, Mr. Johnson read the annual report of the Executive Committee, enumerating the results of their labors for the past year, with such suggestions for the future, as were dictated by the experience of the past. The report was accepted, and ordered printed.

Mr. Tucker, the Treasurer, read his report, which showed the following results:

Balance in treasury, Jan., 1851,........................	$2,643 07
Receipts during the year, from all sources,.............	14,575 78
	$17,218 85
Payments during the year,...............	12,544 71
Balance at this date,..................	$4,674 14
Plate and Medals on hand,.........................	512 25
	5,186 39
Funds invested,..................................	$7,000 00
	$12,186 39

A committee of three from each Judicial District, was appointed by the members present from each district, to nominate officers for ensuing year, and to recommend the place for holding the next Fair. The committee was as follows:

First Judicial District—J. D. Develin, E. D. Morgan, Russell Smith.

Second—J. A. King, L. G. Morris, W. Kelly.

Third—G. Vail, A. Van Bergen, E P. Prentice.

Fourth—J. T. Blanchard, Le Roy Morey, E. W. Rogers.

Fifth—J. Butterfield, A. Z. McCarty, J. A. Sherman.

Sixth—H. S. Randall, J. B. Williams, W. Rathbun.

Seventh—C. Lee, R. Rome, J. W. Bissell.

Eighth—L. F. Allen, J. A. McElwaine, Levi Fish.

On the report of this committee, the following officers were elected for the ensuing year:

President—HENRY WAGER, of Oneida.
Vice-Presidents.
I. James Monroe, of New-York
II. Lewis G. Morris, Westchester.
III. Anthony Van Bergen, Greene.
IV. Winslow C. Watson, Essex.
V. Theodore S. Faxton, Oneida.
VI. Olcut C. Chamberlin, Otsego.
VII. Charles Lee, Yates.
VIII. James McElwaine, Wyoming.
Cor. Secretary—B. P. Johnson, Albany
Rec. Secretary—Erastus Corning, Jr., Albany.
Treasurer—Luther Tucker, Albany.

Members of the Executive Committee—J. T. Blanchard and J. A. Cory, Saratoga; J. Butterfield, Oneida; J B. Burnett, Syracuse, and Wm. Kelley, Dutchess.

Wednesday Evening, Jan. 21.

Mr. Delafield, the President, delivered an address on the subject of the World's Fair, and presented the medals, awarded by this Society to those who received premiums at the London Exhibition, as follows:

To Mr. A. E. Brown, representing the Adirondac Iron Company, a gold medal was presented for specimens of American steel.

To Messrs. Bell, of Westchester, and Gen. Harman of Monroe, were presented each a gold medal for specimens of wheat; and to Mr. W. Hotchkiss, of Niagara, a silver medal for similar specimens.

To B. B. Kirtland, of Greenbush, a beautiful silver goblet, for 34 specimens of Indian corn.

To Mr. Dix, of Oneida, a silver medal for specimens of flax.

To Mr. Person, of New-York, for the piano exhibited, as a rare achievement in the musical art, a gold medal.

To Mr. Palmer, a gold medal, for an artificial limb.

To Robert Livingston Pell, a silver medal, for specimens of the American forest, of which honorable mention was made.

To Le Roy and Blodgett, a gold medal, for a sewing machine.

To Messrs. Allen & Co., of New-York, a silver medal, for the exhibition of tools.

To Messrs. Prouty & Mears, gold medal, for a plow.

To Mr. McCormick, a gold medal, for his reaping machine.

To Dr. Willard and associates, of the Oswego Starch Factory, gold and silver medals of the Society, for the samples of starch and corn farina.

Prof Norton was then announced and delivered an address, on the absolute dependance of Agriculture upon Science, for its progress. He cautioned farmers against the notion, that it is an easy thing to become a scientific Agriculturist, and argued that extreme caution was necessary in order that every step might be certain advance. He declared himself in favor of an Agricultural college, but advised to a small beginning. Let the essentials be first cared for—*teachers* and *students*—and the superstructures would follow in their turn. As a whole the address was well-timed and full of thought, calculated to rightly direct public sentiment.

Thursday Evening, Jan. 22.

The Society convened at the Assembly Chamber, at 7 o'clock, when the Secretary, Mr. Johnson, read the reports of the several committees, awarding premiums as follows:

Management of Farms.—1. E. S. Hayward, Brighton. silver cup. $50—2 B. B Kirtland, Greenbush, silver cup, $..0—3. Albert G. Ford, Rockton, silver cup, $20.

Experiments in Draining.—1. John Johnston, Senaca co, silver cup, $30—2. T. G. Yeomans, Walworth, silver cup, $20.

Dairy Buildings.—Premiums of $25 each, were awarded to Moses Eames, Rutland, and Paris Barber, Homer, for plans of dairy buildings.

Butter.—1. Israel Denio, Rome, $15—2. Noah Hitchcock, Homer, $10—3. L. L. French, Warren, $5.

FIELD CROPS.

Winter Wheat—1. Samuel L. Thompson, Setauket, Suffolk county, 2 acres, 54½ bushels per acre, $20—2. E. M Bradly, East Bloomfield, Ontario county, 41½ bushels per acre, $15—3. James McCready, Plattsburgh, Clinton county, 2 acres, 43 bushels per acre, $5.

Spring Wheat—1. Chas. W. Eells, Westmoreland, Oneida, county, 2 acres, 40 bushels 50 lbs. per acre, $15.

Rye—E. W. Bushnell, Hillsdale, Columbia county, 2 acres, 40 bushels, 22 lbs per acre, $15.

S. Foster, Hillsdale, Columbia county, 2 acres, 42 bushels per acre. No award.

Oats—1. Peter Crispel, Jr., Hurley, Ulster co., 2 acres, 72 bushels 20 qts. per acre, $15—2. H. B. Bartlett, Paris, Oneida county, 2 acres, 72¼ bushels per acre, $10—3. E. W. Bushnell, Hillsdale, Columbia co., 2 acres, 85 bushels 4 quarts per acre, $5—4. I. Foster, Hillsdale, Columbia co., 2 acres, 84¼ bu. per acre; no sample furnished.

Indian Corn—E. M. Bradley, East Bloomfield; 5 55-100 acres, 93 bushels per acre, $20.

Flax—Benj. Aikens, Pittstown, $10.

Tobacco—Thos. A. Smith, Syracuse, $5.

Timothy Seed—1. Douw Van Vechten, $5—2. C. W. Eells, Westmoreland, $3

Buck Wheat—1. L. L. French, Warren, $10—2. D. Conrad, Brunswick, $8.

Peas—1. E. S. Salisbury, Ellisburgh, $10—2. L. L. French, Warren, $8—3. E. M. Bradley, E. Bloomfield, $5.

Beans—E. S. Salisbury, Ellisburgh, $10.

Barley—1. Benj. Enos, De Ruyter, $15—2. E. R. Dix, Vernon, $10—3. Wm. Davison, Hartwick, $5.

20 BUSHELS GRAIN—*Spring Wheat*—1. Geo. K. Eells, Kirtland, $8—D. Conrad, Brunswick, $5.

Barley—Wm. Davison, Hartwick, $5.

Indian Corn—1 B. B. Kirtland, $5—2. Adam Laborence, Bethlehem, $3.

Rye—D. Conrad, $5

Oats—J. McD. McIntyre, Albany, $5.

SEEDS—*Timothy*—C. W. Eells, Westmoreland, $5.

Messrs. Rapalje & Co., Rochester, had on exhibition several samples of Beans, Peas, &c., for which a silver medal was awarded. Messrs. Emery & Co., Albany, exhibited a great variety of samples of Peas, Beans and Garden Seeds, which were pronounced by good judges as being beautiful samples.

FAT CATTLE—*Best Fat Ox*—1. L. Turner, Geneseo, $15—2. B. McNeil, Schoharie, $10.

Best Fat Steer—B. McNeil, Schoharie, $15—2. Milton Knickerbocker, Schodack, $10.

Best Fat Cow—W. A. Mills, Geneseo, $10—2. W. A. Mills, $5.

Best Fat Heifer—D. S. Baker, W. Bloomfield, $10—2. W. A Mills, Geneseo, $5.

FAT SHEEP—*Long Wooled*—B. McNeil, Schoharie, $8.

Middle Wooled—1. J. McD. McIntyre, Albany, South Down, $8—2. D. S. Baker, W. Bloomfield, $5.

Cross Breed—1. B. McNeil, $8—2. D. S. Baker, $5.

Swine—C. Knapp, two heavy live hogs, Special, $8.

Special Premiums—M. L. Turner, Geneseo, ox, $8—B. McNeil, Schoharie, ox, $8—L. D. Ledyard, jr., Cazenovia, ox, $8—D. L. Baker, W. Bloomfield, heifer, $5—W. A. Mills, spayed heifer, $5.

DRESSED MEATS—*Beef*—1. Chas. Snowden, Albany. fatted by Saml. McGraw, Cortland, diploma—2. Jas. Battersby, Albany, fatted by Mr. McGraw, small silver medal.

Swine—over 300 lbs.—1. E. Gove, Watervliet, $5—2. H. O. Hara, Scipio, $3. Under 300 lbs.—1. Rich. Gregory, Fleming, $5—2. Mr. Davison, Hartwick. $3.

Mutton—Long Wooled—1. P. Downy, $5. Short Wooled—1 and 2. Chas. Snowden, $5 and $3. Cross Breed—1. P. Downy, $5.

Turkies—1. B. B. Kirtland, Greenbush, $2—2. W. H. Richardson, Albany, $1.

Geese—Saml. R. Mott, Mechanicsville, $2

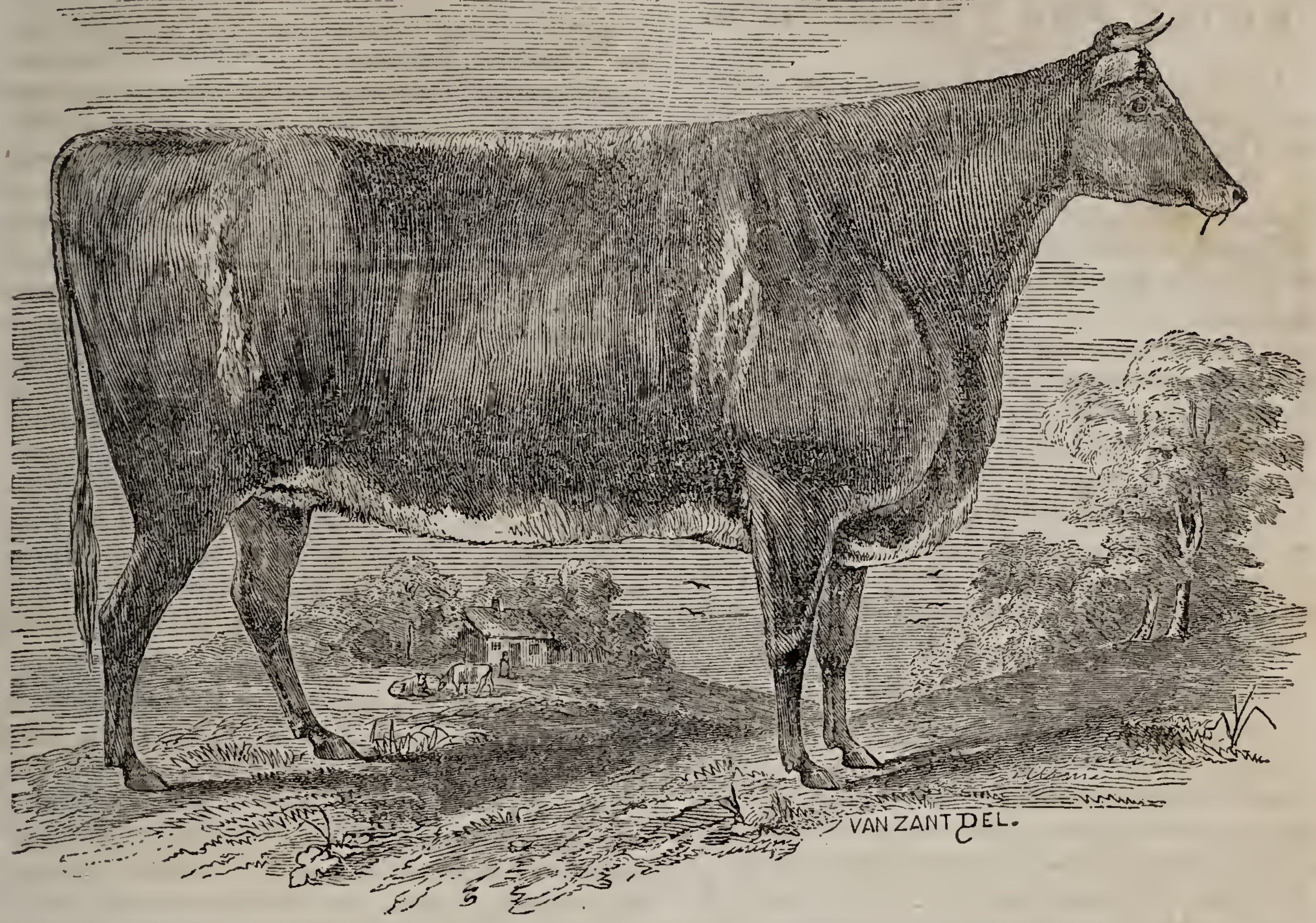
Ducks—W. H. Richardson, Albany, $2.

The Premiums on Fruits we are compelled to omit for want of room. The exhibition was unusually fine. A gold medal was awarded to Mr. Townsend Glover of Fishkill, for models of Fruit and Insects. These were done in plaster and colored to the life.

The President, Hon. J. Delafield, on retiring from the chair, pronounced an elaborate address, in which he reviewed the early history of the State, alluded to the increased facilities for improvement in Agriculture, since it had been studied as a Science, and urged the duty and imperative necessity of establishing an Institution in which the principles of Agriculture should be taught. The production was throughout of a deep and practical nature, and deserves a careful perusal. At the close of his address, Mr. Delafield introduced the President elect, Henry Wager, Esq., of Oneida, who briefly thanked the Society for the honor they had conferred upon him, and remarked that he was not a *talking* man, but that any drafts for *labor* the Society might make upon him, would be duly honored. The exercises of the Society were well attended, and a unanimity and earnestness of feeling, which argues well for the future prospects of the Society, seemed to prevail.

We have only room to add that the exhibition of fat stock, dressed meats, Grains, &c., although only an experiment, and the weather extremely unfavorable, exceeded what was anticipated, and was such as to warrant a more liberal scale of premiums for another year.

At a meeting of the Executive Committee on the 23d, it was resolved that the Fair for this year, be held at UTICA, on the 7th, 8th, 9th and 10th of September, if the requirements of the committee are complied with.


VAN ZANT DEL.

Mr. Vail's Imported Heifer "Yarm Lass."

Eds. Cultivator—Allow me to hand you the pedigree of one of the two Short-horn heifers, which I ordered in July last, from Mr. Bell, the friend and tenant of the late Thomas Bates, Esq., of Kirkleavington, Yorkshire, England, and of which there is in preparation a portrait for the February number of the Cultivator. The directions given to Mr. Bell were, to send me two two-year-old heifers in calf, possessing as much of the Duchess tribe blood as he had in his herd,—well knowing as I did, from a long previous correspondence with these gentlemen, that Mr. Bell's stock was derived from Mr. Bate's herd; and that Mr. Bell's cows were bred to the Duchess bulls of the former gentleman.

The two heifers were shipped from London on the 21st of August, on board the packet ship London, and arrived in New-York, 17th of September last. How well the order was executed, will be seen by the pedigree of the heifer whose portrait is here given. The heifers are both a favorite color, a dark red roan, possessing in a high degree, the characteristic of the Bates herd, as delineated in an article written by John Ewart, Esq., land surveyor. New-Castle-upon-Tyne, and published in the London "Farmer's Magazine," June 1st, 1850, after the sale. Mr. Ewart remarks, speaking of this herd—"magnificent size, straight and broad backs, arched and well spread ribs, wide bosoms, snug shoulders, clean and light feet, small head, prominent and bright but placid eye, were the features of usefulness and beauty which distinguished this herd in the very highest degree; whilst the hide is sufficiently thick to indicate an excellent constitution, its elasticity, when felt between the fingers and thumb, and its floating under the hand upon the cellular texture beneath, together with the soft and furry texture of the coat, evinced in an extraordinary degree throughout the herd, excellent quality of flesh and a disposition to rapid taking on of fat."

Pedigree of the above heifer, "Yarm Lass." Calved 8th Jan., 1849—got by the Duchess bull, 4th Duke of York (10167)—the dam of this bull is Duchess 51st, and this 4th Duke of York, was purchased at the late sale of Mr. Bates' herd by Earl Ducie at £210 sterling, about $932, and is spoken of in the same article above quoted from the "Farmer's Magazine," in the following language—"This animal, now the property of Earl Ducie, is the *beau ideal* of bovine excellence; his magnificent size, and perfection in every point of excellence, entitle him to consideration, as the brightest gem of the herd; and if not the very best bull in existence, he certainly cannot be surpassed." The editor of the "Magazine," in an appended note, remarks—"As a proof of this, and what may be expected from his produce, we beg to observe, that the only three calves got by him, realised the sum of £279 1s., sterling," being equal to $561 each. (It may be well here to state that "Yarm Lass," is now in calf by the Duchess bull 5th Duke of York, and that he is an own brother to the 4th Duke of York above alluded to, and her time of calving about the middle of the present January.) The dam of "Yarm Lass," is Dinah 2nd, got by 4th Duke of Norththumberland (3649)—grand dam Dinah, by "Earl of Darlington (1945) also bred by Mr. Bates—great grand dam [illegible] Thompson, bought of Mr. Bates. By this pedigree it will be seen that the present product of "Yarm Lass" will have three crosses of the Duchess bulls, which will make it ⅞ths Duchess bull blood.

It may not be uninteresting to such of your readers as take an interest in breeding stock, to show how long it may take to breed up a herd of females of a particular family of stock. I may therefore be allowed to remark, that my first importation from Mr. Bates, was in 1840, when I received bull Duke of Wellington and heifer Duchess. Since then I have had from him and Mr. Bell, at diffierent times (including the two recently imported,) five females, and all the females from them I have retained in my herd except two, having now in my herd of this family eight head in all. All of these are in breeding condition, except one. It has been my aim to make my herd to consist eventually, principally of this strain of blood.

The young bulls bred from these cows, I have disposed of, with the the exception of such as I needed for my herd, and I am gratified to learn from their owners that they have done much good where they have gone. Among those sold was "Halton," when a calf not over a month old, to the Hon. Adam Furgusson, and his friend the late Mr. Wettenhall, of Upper Canada, for $300. This bull, now over four years old, Mr. Furgusson used to his herd three years, and for the reason that he could not breed him to his own heifers, he brought him to our state show at Rochester last Sept., to exhibit as *foreign stock*, and for sale. This bull's appearance then, you are aware, attracted much admiration; he was awarded the 1st premium in the class of foreign stock, and was sold shortly after his appearance on the ground at $300, to Mr. S. P. Chapman of Madison county. In a letter I received from the Hon. Adam Furgusson, dated Nov. 12, 1851, in speaking of the bull Halton, he remarks—"He has made a most important change on my herd for the better. I am truly happy to find you are still importing. I must have another bull calf, and put myself in your hands to provide me."

My herd now consists of about thirty head, young and old. I beg you to excuse the liberty I have taken in this lengthy communication, and I hope it may be of some interest to some of your numerous readers. Truly and respectfully yours, &c., Geo. Vail. *Troy, Jan 8th*, 1852.

Clinton County Ag. Society.—The Annual Meeting of this County Agricultural Society was held at Plattsburgh, on the 6th ult The following is a list of officers for the ensuing year.

President—Jona. Battey, Keeseville.
Vice-Presidents—A. J. Moses, Champlain,
Peter Keese, Ausable,
R. O. Barber, Beekmantown,
Saml. Chatterton, do
S H. Moore, Peru,
Andrew Dunning, Chazy
Oliver K. Lapham, Peru,
F. T. Miller, Plattsburgh,
S. M Taylor, Schuyler Falls,
Miner Martin, Plattsburgh.
Secretary—Anderson Keese, Keeseville.
Treasurer—Willets Keese, Peru.

NOTES FOR THE MONTH.

ACKNOWLEDGMENTS.—Communications have been received since our last, from John Waters, James Fountain, Buckeye, C. E. Goodrich, Wm. McC., An old Farmer, Hoosier, A. Mable, H. R. L., Prof. Norton, S. Smith, John Lloyd, B., Geo. Vail, S. Edwards Todd, W. Bacon, A Subscriber, Geo. Mansfield, L. Durand, W. L. Eaton, Wm. Bailey, Ra-ab Shagy, V. A., Geo. E. Snider.

BOOKS, PAMPHLETS, &c., have been received as follows: EVANS' Dairyman's Manual.——An account of Mr. J. J. MECHI'S farming operations at Tiptree Hall, England, from B. P. JOHNSON, Esq.——Transactions of Worcester Co. (Mass.) Ag. Society for 1851, from JOHN W. LINCOLN, Esq.——Annual Reports of the New Haven Hort. Society, for 1851.——Descriptive Catalogue of THORP, SMITH, HANCHETT, & Co.'s Syracuse Nurseries.——Patent Office Report on Agriculture, for 1850-51, from Hon. T. EWBANK, Com. Patents.

☞ We have delayed a notice of the retirement of our late associate, Mr. HOWARD, from the Cultivator, in order that we might at the same time announce his entrance upon his new duties as Editor of the Agricultural Department of the *Boston Cultivator*, a weekly journal of very extensive circulation throughout New England. Mr. HOWARD has been our associate in the management of The Cultivator for many years; and in parting with him, as we do with sincere regret, we take pleasure in congratulating our New-England brethren of the agricultural press on the acquisition to their corps of so valuable a member,—one so worthy of their regard and confidence. We may also congratulate the readers of the Boston Cultivator on his accession to the editorial chair of that paper, for we feel well assured that no one could be found whose sound views and thorough knowledge better qualify him for the place.

UNIVERSITY OF ALBANY.—This institution is now fairly in operation. The opening lecture of the AGRICULTUAL COURSE, was delivered on Wednesday evening, Jan. 14th, to a large and attentive audience, by Prof. NORTON. A large number of the members of the legislature, and citizens of the city, were in attendance, and the sympathy manifested in the purpose of the University, was highly gratifying to the friends and projectors of the Institution. Several of the Senatorial Districts have already furnished their quota of students, and the prospects are fair for a large and respectable class. PROF. NORTON made a brief exposition of the general plan of the University, in the course of which he stated that at no time before, in this country, had so full a course of popular lectures on practical science been accessible to the public. The Law Department is succeeding admirably.

☞ The inquiry of our friend at St. Hilaire, C. E., on the manufacture of maple sugar, we have sent to Mr. HALL of Shelburne, Vt., who we hope will furnish the information desired.

LEAD PIPE.—J. L. M. Lead pipe is worth from 5½ to 6½ cents per pound. The average of pipe of half inch calibre, weighs about three pounds to the yard.

FRENCH MERINO SHEEP—CORRECTION.—In a communication in the December number of the Cultivator, on "Farming in Delaware County," it is said by a typographical error, that French Merino lambs were exhibited at the show of the Delaware County Agricultural Society, from the flock of "F. M'Intosh" of Otsego county. The name should have been printed F. M. ROTCH, of Morris, Otsego county. We greatly regret the mistake, which should have been corrected in our January number, has it been ascertained in season. Mr. ROTCH has imported on his own account, and as agent for others, about 130 head of French Merino sheep. The animals were selected by himself, under the most favorable circumstances. He spent much time in France; visited all the celebrated flocks, and thoroughly discussed with the owners and shepherds, in their own tongue, all matters relating to sheep. He bought the best sheep he could obtain—having ample means at his disposal to do so,—and we have learned from good judges who have seen those he sent over, that they are very superior specimens of that noted stock.

THE WESTERN WORLD INSTITUTE.—Plans for improvement are on foot everywhere. A circular has been sent us from San Francisco, giving notice of a WESTERN WORLD INSTITUTE, whose object is the advancement, throughout the entire Pacific coast, of all the great interests of Agriculture, Commerce, Horticulture, Mining, Manufacturing, and the Arts and Sciences—improvement in the breed of Horses and Cattle, and the general development of all the varied resources of the State. A Museum and Conservatory are established in connection with the Institute, and addresses on the Natural Sciences are in contemplation. This magnificent project is in perfect keeping with the grand scale upon which Californians act, and will aid in bringing to light the exhaustless resources of the country.

HEAVY LITTER OF PIGS.—Mr. GEO. E. SNIDER, of St. John, N. B., writes us that Mr. HAYWARD, a farmer in Kings county, Parish of Sussex, has recently slaughtered nine pigs of extraordinary weight. They were all of one litter, and killed when eight months old. Their weight was as follows: 340 lbs.; 348 lbs.; 308 lbs.; 294 lbs.; 358 lbs.; 367 lbs.; 323 lbs.; 336 lbs.; 300 lbs. Total weight, 2,974 lbs. Average weight, 330½ lbs. Eight of these pigs were sold for $208. Has this ever been beaten?

MINERAL THEORY OF MANURES.—Messrs. LAWES & GILBERT have published in the Journal of the Royal Agricultural Society, the results of many experiments, made by them in the course of many years, to ascertain the correctness of the idea advanced by Liebig, that it is only necessary to apply the ashes of plants or mineral substances, for the support of crops. They took plots of ground of equal quality, containing equal superfices, and applied different substances to the same crop. In one instance, ground which had no manure, produced 16 bushels of wheat to the acre; 14 tons of yard manure produced 22 bushels; the *ashes* of 14 tons of yard manure, 16 bushels; mean produce of nine plots supplied with artificial mineral manures, 16 bushels 3¾ pecks; on other plots, the addition of 65 pounds sulphate of ammonia, (which Liebig held was "unnecessary,") gave an average of 21 bushels. The increase by the use of the mineral manures recommended by Liebig, was therefore, less than two bushels per acre, and the increase by ashes of manure, nothing.

Salt Hay.—The saline herbage of marshes near the sea, is valuable for feeding stock, especially so when fed in connection with *fresh* hay. It is most valuable to mix with hay which grows on bogs or wet lands. The salt hay imparts a relish to the other, and cattle thrive well on the mixture. It is best to mix the salt and fresh together in the mow or stack—putting them in alternate layers. If the salt hay is not more than half made, it answers full as well for this purpose.

Mowing Machine.—A correspondent at Newport, R. I., says—"a good mowing machine is much wanted here. Our fields are smooth, and pretty free from stones, and several, I think, would purchase such machines, if they would do the work properly, and could be furnished at a reasonable price." If any of our readers have used Ketchum's, or any other mower, we should be glad to receive their opinions as to its usefulness.

An Address before the Cortland Co. Ag. Society, by E. Marks, affords one of many evidences, that public sentiment is becoming more universally alive to the necessity of educating mind to think and judge for itself. We wish the truths presented so clearly and impressively in this address—that intelligence is the basis of our boasted freedom and power—that worth should form our estimate of character—that in a high standard of individual attainment is our country's brightest hope, might be echoed and re-echoed till every mind had caught something of their spirit, and learned to act wisely under their influence.

High Manuring.—The editor of the Michigan Farmer, in his foreign correspondence, states that Robert Craig, a very successful cultivator near Glasgow, applies manure at the rate of *one hundred dollars per acre!*—and finds it profitable. Although he makes much on his excellent and fertile farm, he draws large additional quantities 5 miles after paying over a dollar a load for it. It costs him over two and a half dollars per ton when applied. He gives forty tons to each acre. This keeps the soil in fine condition for several years, or till his five-year rotation is completed.

Lard Oil.—The editor of the Prairie Farmer, in reply to the condemnation of lard oil for lamps by the Patent Office Report, says, "We have used lard oil for eignt years steadily, both in the office and in the house, and would by no means exchange it for any material for light with which we are acquainted. We have used it in different sorts of lamps, solar included, and find it everywhere and in every way superior. Its single defect is that in the *coldest weather* in the morning it is too easily affected with cold, requiring the use of a candle till the room is somewhat warmed."

Cost of the Corn-crop in the West.—The Prairie Farmer says that he has made inquiry of several corn raisers in middle Illinois. of the absolute cost of this grain per bushel in the crib. There was very little difference in their estimates, which ranged from *four to six cents!* The soil is of such a nature as to be plowed with the greatest ease, no hoeing is needed, all the cultivating being done by horses, the rows being from half a mile to two miles in length, and the husking of the huge ears being done from the standing stalks in this field.

Wire Worms.—According to a statement in the Prairie Farmer, salt is not agreeable to this larva. Land infested by thousands was sown in the fall with refuse salt at the rate of three and a half bushels per acre. The next summer very few were seen, and afterwards all gradually disappeared. Worth trying, at least, although the proportion of salt when dissolved in the soil would be only about one fifty-thousandth part.

Washing Spring Wheat.—A correspondent of the Genesee Farmer, pursues the following method of freeing wheat for sowing of oats and other seeds:—He puts three pecks of wheat in a wash-tub, fills it with water, and after stirring removes the oats and such other seeds as rise to the surface. The oats that will not float are removed by stirring the whole round rapidly by means of a paddle in a circular motion, which throws the oats towards the middle into a heap, when they are removed, and the process is repeated till the whole is clean.

Dignity and Disgrace of Labor.—Dr. Tuthill shows the dignity of useful labor, and the disgrace of that which is merely fashionable, in his address before the Suffolk county Agricultural Society, as follows:—"If a stout vigorous citizen has a load of wood lying on the side-walk, he may as well hang himself as to be fool enough to saw it himself; yet if Paddy has pitched it in out of sight, we are not sure but he may saw on till doomsday, and no one esteem him less of a gentleman. He would no sooner be caught carrying a trunk the length of a block to an omnibus, than stealing a body from a grave-yard; yet he will boast among his friends of the enormous weight he carries in the gymnasium, having paid a fee of thirty dollars a year for the privilege!"

Liquid and Solid Manure.—Charlss Alexander, a careful and accurate farmer in Scotland, found that while 14 head of cattle would make six loads of solid manure, the liquid would saturate seven loads of loam, rendering it of equal value. He had repeated the experiment for ten years, and found the saturated earth fully equal to the best putrescent manure. How many dollars worth are thus lost annually by each of the million farmers of this country? And what is the aggregate loss in the whole country taken together?

Value of Guano.—At a meeting of the Maryland Agricultural Society, George W. Dobbin, the Secretary, in speaking of the great value of this powerful manure on old or worn-out fields, said that 300 lbs. per acre, on potatoes, was equal to a dressing of good stable manure—more than this made too great a growth of stalks. It succeeded well on wheat and clover, but not on oats.

Crows.—"An old Farmer," after alluding to the increase of crows in many places, and the great injury they do to fields of grain, poultry yards, and in the destruction of small birds, recommends that a law be passed, offering a bounty of 25 cents each for their destruction.

Farm-House.—I wish to build me a farm-house, to cost from $800 to $1,000, and have not, as yet, seen any plan that exactly suited me; and should be gratified if some of your readers, who have built such a house, would furnish the plans for the Cultivator. C. L.

Australian Wheat.—Will some one who has grown this wheat, inform me whether it is likely to be more productive and profitable than the Blue Stem or Soules Wheat—and if so, where it can be had. C. L.

Mill for Grinding Feed.—P. N., Connelsville, Pa. The best mill for this purpose that we know of, is Sinclair's of Baltimore. It will grind four or five bushels per hour. It may be had in this city of Emery & Co., and we presume of dealers in agricultural implements in Philadelphia—price $35.

Governor Hunt, of New-York, in his recent message, has the following remarks on the establishment of an Agricultural Institution:—

"Much interest has been manifested for some years past in favor of creating an institution for the advancement of agricultural science and of knowledge in the mechanic arts. The views in favor of this measure expressed in my last annual communication, remain unchanged. My impressions are still favorable to the plan of combining in one college two distinct departments for instruction in agricultural and mechanical science; but many whose opinions are entitled to weight, contend that a separate establishment for each branch would be most advantageous to both. Before adopting any final action on the subject, the merits of the several systems of organization that have been proposed, should be maturely considered. I would respectfully recommend that a sufficient portion of the proceeds of the next sale of lands for taxes be appropriated to the erection of an institution which shall stand as a lasting memorial of our munificence, and contribute to the diffusion of intelligence among the producing classes, during all future time.

BUSINESS NOTICES.

Every Subscriber an Agent.

All our Subscribers, as well as all Postmasters, are especially invited to act as Agents for our publications, The Cultivator and The Horticulturist.

☞ Agents who compete for our Premiums, will aid us in keeping their accounts, if they will number their subscribers, 1, 2, 3, and upwards.

Remember the Terms to Clubs.

Seven Copies for $5 00—Fifteen Copies, and the Horticulturist, six months, to the Agent, for $10.00.

☞ In answer to several inquiries, we would state, that it is not required that all papers in a club should be sent to one post office We will address them to as many different offices as may be necessary.

Premiums to Agents of the Cultivator.

As an inducement to those disposed to act as Agents, the following *Premiums* will be paid in Cash, Silver Plate, or Agricultural Books and Implements, to those who send us the largest list of subscribers for The Cultivator for 1852, previous to the *tenth of April next.*

1. To the one sending us the largest number, with the pay in advance, at the club price of sixty-seven cents each, the sum of Fifty Dollars.
2. To the one sending us the next largest list, the sum of Forty Dollars.
3. To the one sending us the next largest list, the sum of Thirty-Five Dollars.
4. For the next largest list, the sum of Thirty Dollars.
5. For the next largest list, the sum of Twenty-Five Dollars.
6. For the next largest list, Twenty Dollars.
7. For the next largest list, Fifteen Dollars.
8. For the next largest list, Ten Dollars.
9. For the next largest list, Five Dollars.
10. To all who send us Thirty Subscribers or over, and do not receive one of the above Prizes, a copy of The Horticulturist for one year.
11. To all who send us Fifteen Subscribers, and do not receive one of the above Premiums, The Horticulturist for six months.

Albany Prices Current.

Albany, Tuesday, Jan. 20, 1852.

FLOUR.—The market at this point, during the last four weeks, has been quiet, with an occasional exception of purchasers on speculation. The trade is confined to the city and a limited Eastern demand at $4.25a4.37½ for ordinary State, $4.37½a4.50 for good State and Indiana and Michigan, $4.50a4.62½ for Genesee, and $4.75a5.50 for fancies and extra. A sale of 1,000 bls. Oswego, was made last week at $4 25. Buckwheat flour is saleable from store at $2a2.06¼.

GRAIN —We have no sales of wheat to report; holders have advanced their views, and prime samples of Genesee wheat are firmly held at $1.12½, with not much disposition to sell at that figure. Some sales of Barley have been made from store and to arrive, at prices ranging from 70a78c. for ordinary to good lots; in the street 65a78c. is paid. Oats in the street are now firm at 47c., and Rye 68c.

HOPS sell in retail lots at 30a33c. In New-York the market is firm at 27a35c. for Eastern and Western, with a good demand. The Shipping List, at New-York, estimates the new crop of Hops at 14,000 bales, with 1700 bales of old Hops on hand, and states the dedeficiency at about 5,000 bales.

PROVISIONS.—In cut and barreled meats, we have no sales of moment, at this market to report; a sale of 100 bls. mess pork, cut from Lake Hogs, was made yesterday at $14.50. The retail market may be quoted, mess pork at $15.50; prime $14; clear $16. Mess beef $9.50; prime $5.50; smoked beef 9c.: smoked hams 9½c.; hams in pickle 9c.; lard 9½c. Cheese 6½a7c. Butter 16a18c.

Dressed Hogs have sold readily on arrival, the price for several days past ranging from $6.50a6.75 for fair to prime lots; lots, still fed, are taken on the spot and to arrive at $5.62½a5.75. In the West the packing business is nearly closed, the number cut is less than last year, but the hogs are heavier; whether enough so to make up the deficiency and the stock of old Pork on the sea board, remains to be seen.

WOOL.—The market at this point is quiet; the demand, however, is good. At New-York, on the 17th inst., the Reporter quotes only one transaction in domestic; a sale of 12,000 fine fleece at 43c. cash. Other wools of same class are held at 45c. Quotations are nominally the same, but an abatement of 3c. per lb. from December prices would be submitted to effect sales. In foreign, there has been a small demand from dealers, but the general tone of the market is flat. Quotations unaltered. From the other markets there is nothing of interest.

SEEDS.—The New-York papers quote Clover in better request for export both to England and the Continent; 25 tcs. sold for Scotland on private terms. Timothy remains dull; mowed may be qoted $14a18, and reaped $20a21, without sales. Of Flax, we notice sales of 100 tcs. clean, within a week, at $12.50; and 1500 bushels rough, in lots, $1.44a1.50, which for the latter is an advance.

To Virginia Farmers.

A PRACTICAL Farmer and Dairyman wishes to obtain a farm to manage at a given salary, or on shares, in some healthy locality in Virginia or in Maryland, for a few years, with a view to ultimate settlement after testing climate and soil. Good references given, if required. Address, CULTIVATOR OFFICE.
Feb. 1—1t.*

THE WORKING FARMER,

A MONTHLY Periodical devoted to Agriculture, Horticulture, Floraculture, Kitchen Gardening, Management of Hot-houses, Green-houses, et. al. Embracing Agricultural Chemistry, preparation of manures, &c., &c.

Edited by Professor JAMES J. MAPES, and published at 25 Cliff-street, New-York.

Terms per year, in advance,—single copies,...... $1 00
" " six copies, ... 5 00
" " twenty-five copies,. 20 00

Back volumes in covers, at subscription prices.
The Fourth Volume will commence March 1, 1852. Feb 1.

PERUVIAN GUANO

AND other Fertilizers. Several hundred tons of first quality of Peruvian Guano, constantly on hand for sale.
Also, BONE DUST. PLASTER OF PARIS and POUDRETTE.
A. B. ALLEN & CO., 189 and 191.
Water-st., New-York.
Jan. 1—tf.

Fine Fowls for Sale.

VERY handsome specimens of the Albany Dorking, Black Poland. and Silver Spangled Poland, are for sale by
Albany, Jan. 1, 1852—2t. E. E. PLATT.

Eggs from Choice Fowls.

THE subscriber will have for sale, in the course of the following spring, eggs from fine specimens of fowls of the following varieties: Shanghae, (dark-colored and white,) Dorking, (spangled,) and Black Spanish. Also eggs from Aylesbury ducks—a variety highly prized by epicures, from the superior quality of their flesh.

Also for sale, several pair of Dorking and Shanghae fowls.

Greenbush, Feb. 1, 1852.—1t. WILLIAM H. KIRTLAND.

Farm For Sale.

THE subscriber will sell at private sale, the Farm in Westminster, Vt., of the late William Stickney, except what has been set off for the widow's dower, consisting of about thirrty three acres of excellent meadow land, about forty acres of pasture adjoining, with about five acres of land on the Main street, having a small building thereon. Also about one hundred and sixty acres of pasturing and woodland, on Rocky Hill, southwardly from the above premises, and the reversion of the widow's dower in farm. This farm is so well known that a further description is deemed unnecessary. For terms apply to the subscriber, Chatham-st., Boston, or to Stephen Barker, in said Westminster. ISAAC STICKNEY,

Westminster, Vt., Feb. 1.—1t Administrator of Wm. Stickney.

Imported Suffolk, Essex and Middlesex Hogs.

THE subscriber has now on hand and for sale, some pure blooded Suffolk, Essex and Middlesex Swine, from the importation of the late william Stickney of Boston. All orders and selections entrusted to Isaac Stickney, administrutor of the estate of William Stickney, will be promptly attended to, and selections made with great care.

ISAAC STICKNEY,
Corner of Chatham-st. and Chatham Row, Boston.
Boston, Feb. 1, 1852.—1t.

New and Fine Shrubs and Plants.

ELLWANGER & BARRY, Proprietors of the Mount Hope Nurseries, Rochester, N. Y., solicit the attention of those interested in Ornamental Plants, to their large stock of rare and beautiful Shrubs and Plants, among which are the following

HARDY SHRUBS.

Deutzia Scabra, or Garland Deutzia, a fine white flowering shrub.

Forsythia Viridissima.

Ribes Gordoni—Gordon's Currant—yellow and crimson; very fine.

Spiræa prunifolia, flore pleno. Small double white flowers in great profusion; fine dense habit.

Spiræa lanceolata, or Reevesi, one of the finest of the genus.

Spiræa Chamædrifolia, *Niconderti*, *Lindleyana*, *Japonica*, and twenty others.

Syringa (Phyladelphus,) *Pubescens*, *Zepherii*, *Cordata*, *Double*, *Columbiana* and others, all fine.

Lonicera Ledibourii, a fine Californian shrub.

Tamarix, *Africana*, *Germanica*, *Gallica*, and *Libanotica*.

Viburnum Lantanoides, a beautiful shrub.

Wiegela Rosea, the finest hardy shrub lately introduced from China. The above excellent things can be furnished in quantities at low prices

SELECT GREENHOUSE AND BEDDING PLANTS.

Fuchsias.—Our collection is one of the best in America. The most distinct and best varieties yet introduced, and quite rare—such as *Pearl of England*, *Fair Rosamond*, *Serratifolia*, *Serratifolia multiflora*, *Fulgens corymbiflora*, *Corymbiflora alba*, *Magnificent*, *President*, *President Porcher*, *Spectabilis*, &c., are propagated largely.

Verbenas.—A collection of 50 varieties, comprising everything fine introduced to this time.

Heliotropes.—Souvenir de Liege, *Corymbosum*, and some new varieties just received, to be announced hereafter.

Plumbago Larpentæ.

Cupheas platycentra, *Strigulosa* and others; the first is one of the finest bedding plants.

Lantanas.—Ewing; the fine new Cincinnati variety, rose and straw color. *Mutabilis Major*, and several others.

Bouvardias triphylla, and others.

Abutilons.

Salvias.—Splendens major, *Oppositifolia*, *Azurea* and others; superb plants for masses.

Fabiana imbricata.

Hydrangeas.—Hortensis, *Japonica*, *Cordata*, *&c.*

Buddlea Lindleyana.—A fine shrubby plant, with large clusters of purplish lilac flowers in the autumn.

Habrothamnus elegans.—A superb plant, half shrubby, with large clusters of showy crimson flowers; blooms equally well in the open ground in autumn, and in the house in winter.

Petunias.—A large collection, embracing all distinct and good sorts.

Lobelia fulgens insignis—flowers of dazzling brilliancy; new.

Lobelia fulgens alba; new.

Veronica Lindleyana.—A charming autumn flowering plant; long elegant spikes of pale, nearly white blossoms.

Veronica Andersoni.—The finest of all; new.

Tree Violets.—White and purple.

Chrysanthemums.—A fine collection of the novel and beautiful pompone, or dwarf varieties.

Dahlias—A superb collection, including the English and French prize sorts of 1851, all at very low rates.

Cinerarias.—A fine collection of new and beautiful sorts, including *Magnificent*, *Atilla*, *David Copperfield*, *Wellington*, *Beauty of Newington*, *&c.*, *&c.*

All the above articles furnished in large or small quantities, at low rates, and packed so as to go any distance with safety.

Priced Catalogues of Dahlias, &c., &c., ready first of March.

Rochester, Feb. 1—2t.

SYRACUSE NURSERIES,

Thorp, Smith, Hanchet & Co., Proprietors, Syracuse, N. Y.

AMONG the Fruit and Ornamental Trees, Shrubs, Vines, Roses, Bulbous Roots, Greenhouse Plants, &c., cultivated and for sale at this establishment, may be found, in quantity and quality, not surpassed in this country,

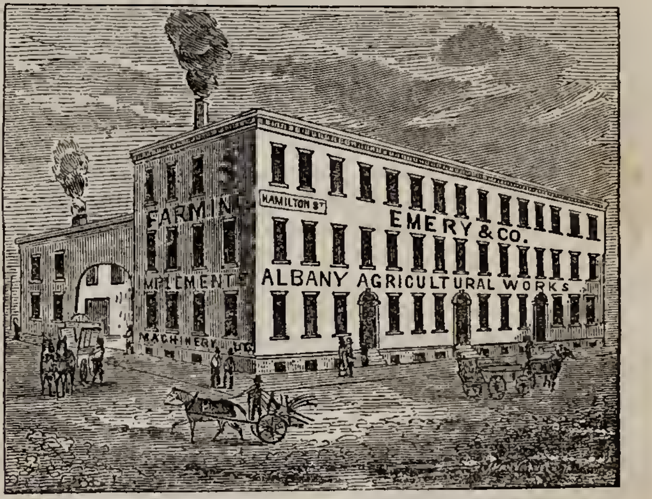
Standard and Dwarf Apple Trees.
Standard and Dwarf Pear Trees.
Standard and Dwarf Cherry Trees
Standard and Dwarf Peach Trees.

PLUMS, QUINCES, APRICOTS, and NECTARINES; all the best sorts of *Currants*, *Raspberries*, *Strawberries and Gooseberries;* Evergreen Trees, including Deodar, Lebanon, and Japan Cedars, at much less than the usual rates; Junipers, Spruces, Taxodiums, &c. Pæonies, a splendid collection of Tree and Herbaceous. Dahlias, 150 selected sorts, embracing the best English and American, 25 to 50 cents for whole roots. Phloxes, over 50 of the choicest kinds. Roses, 6,000 plants of the finest varieties, with all the new acquisitions. Bulbous Roots, received last fall from Holland, consisting of Double Tulips, Hyacinths, Lilies, Crocuses, &c. Bedding out Plants of every description. Buckthorn two and three years old, very stout; all for sale, at wholesale or retail, as low as at any other establishment in America.

A new edition of our General Catalogue is now published, embracing, 1st. A full Descriptive Catalogue of Fruits. 2d. A Special Catalogue of Dahlias, Border Plants, &c., and 3d. An extensive Catalogue of Hothouse and Greenhouse Plants, Bedding out Plants, and Bulbous Roots; to which we refer for description and prices.

☞ As the postage on this Catalogue for 500 miles and under, is 4 cents; from 500 to 1500, 8 cents; from 1500 to 2500, 12 cents, &c., which we are compellod to prepay, we must require all applicants, besides paying their postage, to enclose *one letter stamp* for any distance under 500 miles, and *three* for any distance exceeding it.

Syracuse, Feb. 1, 1852—2t.



EMERY & CO.'S

New-York State Agricultural Society's

FIRST PREMIUM

RAILROAD HORSE POWER,

AND

OVERSHOT THRESHER AND SEPARATOR.

THE above Horse Powers have been awarded the highest Premiums at the Fairs of the New-York State Agricultural Society in 1850, and again in 1851; also, the highest Premium of the Michigan State Fair, at Detroit, Mich., in September, 1851, where a majority of the Committee owned and were using Wheelers' Powers on their farms, having purchased them previous to seeing our own; also a Gold Medal at the American Institute in 1851. It was also exhibited at the State Fairs of Ohio, Maryland, and Pennsylvania, and received the highest awards which could be given by the rules of their Societies. In every case, it has been in competition with all endless chain Powers of any note in this country—among which were Wheeler's Rack and Pinion. All of our Powers have the name, EMERY & CO., cast upon every link of the chain and hub of band-wheel. None others are genuine.

ALBANY AGRICULTURAL WORKS,

Hamilton, Liberty, and Union-streets.

The subscribers are the originators and sole proprietors of the above works, which embrace a very large collection of labor saving Machinery, not excelled in this country for facilitating the manufacturing of Agricultural Machinery to any desired extent, and with uniform accuracy and despatch.

WAREHOUSE AND SEED STORE,

369 and 371 Broadway.

Our Warerooms are among the most spacious in the city, and collection of articles on hand large and new—most of the Implements being of our own manufacture, and the Seeds grown for our own trade. For prices, particulars, etc., see Illustrated Catalogue, furnished gratis, by mail or otherwise. Feb. 1—1852.

THE Tranasctions of the New-York State Agricultural Society, vols. 1 to 9, for sale at the Office of "The Cultivator," price $1 per vol

Fruit Scions for 1852.

THE subscriber will furnish Scions for this season's grafting, of the celebrated fruits of Western New-York:

APPLES.

Northern Spy,
Norton's Melon,
Wagener,
St. Lawrence,
Canada Red,
Swaar,
Baldwin,
Pomme Grise,
Seek-no-further,
Hertfordshire Pearmain,
Fameuse,
Bourassa,
Twenty Ounce Apple,
Hawley, or Douse,
Gravenstein,
Bailey Sweeting,
Ribstone Pippin,
Summer Rose,
Rambo,
Esopus Spitzenburgh,
Yellow Bellflower,
Roxbury Russett,
Early Harvest,
Early Strawberry,
Autumn Strawberry,
Early Joe,
Fall Pippin,
Holland Pippin,
Rhode Island Greening,
Tallman Sweeting,
Green Sweeting,
Porter.

PEARS.

Virgalieu,
Seckel,
Swan's Orange, or Onondaga.
Bartlett,
Oswego Beurre,
Brown Beurre,
Osband's Summer,

and most of the Foreign varieties.

Apple Scions $1.00 per hundred, and Pear Scions Three Shillings per dozen. They will be carefully packed and sent by Express or by Mail. A discount on apple scions will be made to nurserymen.

Early orders are requested, to insure a supply. Address me, (post-paid,) at Rochester, Monroe County, New-York.

JAMES H. WATTS.

N. B.—In all cases where it is possible, I will send samples of the "Northern Spy." Reference can be made to Mr. Tucker of "the Cultivator" Rochester, Monroe Co., N. Y., Feb. 1, 1852.—1t.

NOTICE.

THE undersigned has disposed of his interest in the "State Agricultural Warehouse," No. 25 Cliff street, to Mr. A. LONGETT, who will in future conduct the business on his own account.

New-York, Feb. 1, 1852--1t. GEO. H. BARR.

State Agricultural Warehouse.

EMERY'S, Kell's and Wheeler's Horse Powers and Thrasher's Hovey's, Clinton's, Tower's, Sinclair's and Botts' Straw and Stalk Cutters.

Vegetable Cutters, for slicing up potatoes, beets, &c.

Corn Shellers of various patterns.

Fanning mills of Bryan's make—this is considered one of the best Mills in use.

Clinton's, Bamborough's, and other makes.

Prouty & Mears' Premium Plows of all sizes.

Minor & Horton's and Eagle plows.

Harrows of Geddes, Triangle and Scotch patterns.

Paring Plow, a superior article, made under the direction of Prof. Mapes.

Subsoil Plows of Wier's pattern, which is half the draft of the old style.

Ox or Road Scrapers, Seed Sowers, Cultivators, &c.

Field and Garden Seeds.

Fertilizers, such as Guano, Bone Dust, Bone Coal, Plaster, Poudrette, Bone Manure and Sulphate of Soda. For sale by

A. LONGETT,
Feb. 1, 1852—1t. No. 25 Cliff Street, New-York.

Devon Bull for Sale.

THE subscribers offer for sale their thorough bred Devon Bull "Uncas," calved the 19th of March, 1851. Sire "Neguntieook," grandsire "Prince Albert," (102 of English Herd book;)—Dam "Non-pareille," by "Lord Lynedock;" grandam a Quarterly cow. "Negunticook" won the first prize at the American Institute in 1850; and the first at the State show in 1851. "Nonpareille" won the first prize as a three year old heifer at Barnstable, England, in 1846; and the first at the State show in 1851. He may be seen at our place; or further particulars will be given to any one addressing,

W. P. & C. S. WAINWRIGHT,
Feb. 1—2t. Rhinebeck, Dutchess co., New-York.

Splendid Farm in Ohio for Sale.

WE have a splendid farm for sale, containing about 300 acres. It is situated about 2½ miles west of Columbus, and within 2½ miles of London, the county seat of Madison county. An excellent McAdamized road, from Columbus to Xenia, passes through it. The access to market, either east or south, is easy and quick. The railroad from Cincinnati to Cleveland, has a depot at London, 2½ miles from it.

About 125 acres of the land are cleared, and under good improvement. The balance is well timbered, and the whole is under fence. It is well watered, having springs or streams in abundance.

On it is a substantial brick dwelling house and two other comfortable tenements. The orchard contains about 200 apple, peach, and pear trees. The whole farm is well adapted for raising grain, or corn, and would make an admirable dairy or stock farm.

The proprietor has made arrangements in the west to go into another kind of business, and will sell the above farm on personable terms.

For terms apply at this office, or to

WOMBAUGH & WHEELER,
Feb 1—2t. Real Estate Agents, Columbus, O.

THE HORTICULTURIST,

AND

JOURNAL OF RURAL ART AND RURAL TASTE,

EDITED BY A. J. DOWNING, NEWBURGH,

Author of Landscape Gardening, Fruits and Fruit Trees of America, Cottage Residences, Country Houses, &c., &c.,

Is published monthly, at the office of The Cultivator, Albany, by LUTHER TUCKER, Proprietor.

THIS popular publication, which is gradually extending its influence throughout the country, and is becoming indispensible to the tasteful Gardener, the Fruit Culturist and the Floriculturist, will be continued as heretofore, under the Editorship of Mr. DOWNING, whose ability and taste in all matters of country life, are unequalled by any writer of the present day.

The extended and valuable correspendence of THE HORTICULTURIST, presents the experience of the most intelligent cultivators in America; and the instructive and agreeable articles from the pen of the Editor, make it equally sought after by even the general reader, interested in country life. To all persons alive to the improvement of their Gardens, Orchards, or Country Seats—to Scientific and practical Cultivators of the Soil—to Nurserymen and Commercial Gardeners, this Journal, giving the latest discoveries and improvements, experiments and acquisitions in Horticulture, and those branches of knowledge connected with it, will be found invaluable.

A NEW VOLUME (the 7th,) commences with the January number for 1852; and it will be the constant aim of the Editor and the Publisher, by every means in their power, to render it still more worthy, by every practicable improvement, of the liberal patronage it is receiving.

☞ All letters on business must be addressed to the Proprietor LUTHER TUCKER, Albany, N. Y., and Editorial correspondence to be addressed to the Editor, A. J. DOWNING, Esq, Newburgh, N. Y.

TERMS.—Each number contains 48 pages, embellished with a Frontispiece and numerous Illustrations, printed on the finest paper, and in the best manner. Price, $3 a year—Two copies for $5.

New Staminate Strawberry.

WALKER'S SEEDLING.

THIS new variety of the Strawberry is for sale and will be sent out, to applicants in the spring of 1852, price one dollar per dozen. Orders may be addressed to Samuel Walker, Roxbury, or to Mr. Azell Bowditch, at the Massachusetts Horticultural Seed Store, School Street, Boston.

The Fruit Committee of the Massachusetts Horticultural Society, report of the variety as follows:—"WALKER'S SEEDLING;" this strawberry has now been fruited three years; it is a dark colored berry, of good size, a very abundant bearer, of high flavor, very fine quality, and it will be, it is believed an acquisition. It is a staminate, worthy, as the committee think, of an extended cultivation. *Boston, June 28th*, 1851.

Fruit, Ornamental and Evergreen trees, shrubs, &c., for sale at the nurseries of SAMUEL WALKER,
Feb. 1—3t. Roxbury, Mass.

FARM SCHOOL.

THE Mount Airy Agricultural Institute, located at Germantown, Pa, will open for the summer term on the first Thursday of April next. For particulars address the Principal,

JNO WILKINSON,
Jan. 1, 1852—3t. Germantown, Pa.

Balsam Fir, Arbor Vitæ, and other Forest Trees.

HENRY LITTLE & CO., of BANGOR, Maine, will furnish any number of Evergreen and other Forest Trees, taken up with *earth on the roots*, with the greatest care, and sent to any part of the United States by Steamers or Railroad—and carefully packed in large boxes, at short notice, at the following prices, viz:

From 6 inches to 1 foot, at 1 cent, or $10,00 per 1000.
From 1 foot to 2 feet, at 1½ cents, or $15.00 per 1000.

The above prices refer more particularly to Balsam Fir and Arbor Vitæ Trees.

We charge what the boxes cost, but nothing for packing.

For two years past, the trees we have procured and sent to a distance, have lived generally, and have given good satisfaction. Evergreens will not live unless taken up with great care.

Bangor, Jan. 1, 1852—4t.

FOWLS AND EGGS.

THE great desire manifested in New-England for procuring good Poultry, has induced H. B. COFFIN, *Newton, Mass.*, to pay particular attention to breeding and importing first rate stock All persons desirous of having the purest and best to breed from, may depend upon being faithfully served. Among many kinds of Fowls for sale by him, are the following, which he is very particular in breeding.

Shanghae—Forbes stock.
Imperial Chinese—Marsh stock.
Cochin China—Coffin do
White Shanghae do do
Black Shanghae do do
Golden Poland, or Spangled Hamburgh.

Dealers in Fowls or Eggs for hatching, supplied upon liberal terms. Orders addressed to *No. 5 Congress Square, Boston*, will be promptly executed.

Reference to Mr. J. VAN DUSEN, of Cincinnati, Ohio, who will take orders for Fowls, as advertised above.

Boston, Aug. 1, 1851—12t.

Improved Stock.

CATTLE, of the Durham, Devon, Hereford, Alderney, and Ayrshire breeds.

SHEEP, of the Native and French Merino, Saxony, South-Down, and Cotswold.

PIGS of the Lincoln, Suffolk, and Berkshire breeds.

From our long experience as breeders and dealers in the above kinds of stock, and our excellent situation for purchasing and shipping, we think we can do as good justice to orders, as any other house in the United States.

A B. ALLEN & CO,
189 and 191 Water st., New-York.

Jan. 1, 1852—tf.

United States Agricultural Warehouse and Seed Store.

THE subscribers solicit the attention of the public to the large and varied assortment of Agricultural and Horticultural Implements, Field, and Garden Seeds, which they have constantly on hand, and offer for sale at the lowest prices, and on the best terms. Persons in want of any articles in their line, would do well to call upon them before purchasing elsewhere. A descriptive Catalogue will be sent gratis upon application, post-paid.

N. B. Guano, Bone Dust, and other fertilizers.

JOHN MAYHER & CO.
No. 197 Water-St., New-York.

Dec. 1—tf.

THE AMERICAN MUCK BOOK,

A complete Manual of Manures. Price $1.

C. M. SAXTON, agricultural book publisher, has just published—the American Muck Book—treating of the Nature, Properties, Sources, History and Operations of all the principal Fertilizers and Manures in common use, with specific directions for their preparation, preservation and application to the soil and to crops, as combined with the leading principles of practical and scientific Agriculture, drawn from authentic sources, actual experience, and personal observation. Illustrated with engravings. By

D. J. BROWNE.

Author of Sylva Americana, a Treatise on Forest Trees, American Poultry Yard, &c.

C. M. SAXTON,
Agricultural Bookstore, 152 Fulton street, New-York.

The following is from Dr. C. T. Jackson, of Boston, the best Agricultural Chemist in the U. S.:—

[COPY.]

BOSTON, November 6th, 1851.

Dear Sir: I have the pleasure of acknowledging the receipt of a copy of the "American Muck Book," recently published by you, and edited by Mr. D. Jay Browne.

From an attentive examination of this book, I have come to the conclusion that it is one of the best works extant, on the principles of scientific agriculture, and the best compendium of our most recent knowledge of the nature of manures and their adaptation to particular soils and crops. It cannot be expected that a single volume could possibly contain the whole sum of chemical knowledge applicable to the science of chemistry; but on looking over the closely printed and compact tables of analyses, and the abundant formulas, which this publication contains, I could not fail to be surprised at the industry manifested in preparing it. I was also gratified to find it so well adapted to the American system of husbandry, and so practical in its character. Its copious and accurate index adds not a little to its value.

I shall certainly recommend it to my agricultural friends as a very useful book, and one necessary to every scientific farmer. I am, very respectfully, your ob't. servant,

CHARLES T. JACKSON, State Assayist, &c. &c.

To C. M. SAXTON, Esq., New-York. Jan. 1, 1852.—3t

TO FARMERS.---POUDRETTE.

THE LODI MANUFACTURING COMPANY having enlarged their works, are prepared now to receive and fill orders for Poudrette with dispatch, and in all cases with a *freshly manufactured article*, at their usual prices, $1,50 per barrel for any quantity over six barrels. 3 barrels for $5.—$2 for a single barrel, delivered free of cartage on board of vessel or elsewhere, in the city of New-York.

The Company refer to their pamphlet (furnished gratis) for hundreds of certificates as to the efficacy, cheapness, and superiority in all respects of their Poudrette over any other known manure for raising a crop of corn—also to A J. Downing, Esq., B. M. Watson, Esq., Hon. I. P. Cushing, J. M. Thorburn & Co., and many others as to excellency as a manure for flowers and trees, and the following from Hon. Daniel Webster, Secretary of State:

WASHINGTON, March 19, 1850.

"If I neglect the annual purchase of some of this article, my gardenerer is sure to remind me of it. He thinks it almost indispensable, within his garden fence; but there are uses, outside the garden, for which it is highly valuable, and cheaper, I think, than any other manure at your prices. A principal one, is the enrichment of lawns and pleasure grounds, in grass, where the object is to produce a fresh and vigorous growth in the Spring. Our practice is to apply it, when we go to town in the Autumn, and we have never failed to see its effects in the Spring."

All communications addressed to the "LODI MANUFACTURING COMPANY, 74 Cortlandt street, New-York," will meet with prompt attention. Jan. 1, 1852—6t.

A Book for Wives and Daughters.

THE LADIES GUIDE; OR SKILLFUL HOUSEWIFE, (*price twenty-five cents,*) being a Complete Guide to Domestic Cookery, Taste, Comfort and *Economy;* embracing *six hundred and fifty-nine* Receipts, pertaining to household duties, Gardening, Flowers, Birds, Plants, &c. Published by

C. M. SAXTON,
152 Fulton Street, New-York.

Jan. 1—3t.

New and Important Insurance.

Northern N. York Live Stock Ins. Co., Plattsburgh N. Y.

INCORPORATED by the Legislature of the State of New-York, July, 1851. Horses, Cattle, and all kinds of Live Stock insured against Death, by the combined risks of Fire, Water, Accidents, Diseases, &c. CAPITAL, $50,000.

DIRECTORS.

James Farr,	Washington county.	Amasa C. Moore,	Clinton county.
Joseph Potter,	do	John Boynton,	do
Olif Abell,	do	Zephaniah C Platt,	do
Pelatiah Richards,	Warren co.	Cornelius Halsey,	do
Walter Geer,	do	James Averill,	do
Wm. E. Calkins,	Essex co.	Jacob H. Holt,	do
Albert Andrus,	Franklin co.	Peter S. Palmer,	do
John Horton,	St. Lawrence co.	George Moore,	do
Thomas Conkey,	do	Henry G. Hewitt,	do

JAMES FARR, President. G. MOORE, Plattsburgh, Sec'y
A. C. MOORE, Vice-Pest. Z. C. PLATT, do Treas.
L. C. MIX, Port Aim, Gen. Agent.

October 13, 1851.

This company are now organized and ready to receive applications for insurance. It is confidently believed that the owners of valuable animals will avail themselves of the advantages offered by this mode of protection. If fire, life and marine insurances are proper and expedient, so is live stock insurance: the reasons for insurance are equally applicable to all.

The company have adopted such rates as, they believe, will furnish the means of paying ordinary losses, without resort to an assessment. But to guard against extraordinary losses, which may arise from contagious diseases or epidemics, it becomes necessary to require premium notes.

To the Owners of Horses and Live stock.

Office of the Northern New-York Live Stock Ins. Co.,
PLATTSBURGH, August 16, 1851.

The Directors of the above Company, incorporated by the Legislature of the State of New-York, at its extra session in July, 1851, respectfully request your attention to the following facts bearing on this subject.

1st. Value of this class of property. By the census of 1845, there were at that time in the State of New-York, as follows:

Horses,	One-half a million,	505,155
Neat Cattle,	Over two millions,	2,072,330
Cows milked,	Nearly a million,	999,490
Sheep,	Over six millions,	6,443,855
Hogs,	Over one million and a half,	1,584,344

Without making any estimate of the value of this property, it is apparent that it is immense; extending to every inhabited spot, and essential to the health and comfort, almost to the existence of the inhabitants.

2d. These animals are subject to disease and accident. It is asserted by a Vermont Company, engaged in the Live Stock Insurance, as a fact which cannot be disputed, that the aggregate loss upon this species of property throughout New-England, is *greater* than the losses by fire; at all events, it is a fact undoubted that the annual loss is very great, and the owner is left unprovided with any means of security against the hazard incident to this description of property.

3d. The knowledge of this risk is one of the leading hindrances to improvement in the breed of that useful and noble animal, the horse.

Men of capital are slow to invest large sums in a valuable animal, whose loss they must every day risk, to the amount often from five hundred to a thousand dollars, in every valuable breeding horse.

With the ample security to be afforded by sound Insurance Companies, the investment of capital in horses and live stock may be made as safe and safer than the carrying of freight on the seas and inland waters. Marine Insurance has rendered this last business steady and profitable; while without it, it would want the confidence which that branch of business now commands. The absence of this Insurance in the case of live stock is universally felt, while the owner of real estate can command half or two-thirds of its value when needed for an emergency.

While the owner of the ship, "the play thing of the wind and waves," may obtain any reasonable advance; the owner of equally valuable property, invested in horses and cattle, cannot obtain a dollar. The only exception being fat cattle destined for market. In vain does the owner of the horse appeal to his industry or usefulness. The answer is, that his property is liable to disease and accident, and that as security it is utterly worthless.

4th. The Insurance principle comes in. and does for him what Life Insurance has done for the young beginner in trade, taking away the risk arising from the uncertainty of life.

It will do for him what Fire Insurance has done for the owner of personal property; placing him nearly on a level with the owner of real estate.

Your aid is respectfully solicited in behalf of this company, the first chartered in this state for this object. The Directors intend it shall be prudently conducted, and one which shall deserve the confidence of the public.

Terms of insurance will be furnished by the agents of the company.

GEORGE MOORE, Secretary. JAMES FARR, President.

Dec. 1—6t.

Agricultural Books

OF all kinds, for sale at the Cultivator Office, 407 Broadway, Albany.

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Kinderhook Nursery and Garden,

At Kinderhook, Columbia co., New-York.

THE proprietor has on hand his usual large supply of Fruit and Ornamental Trees, Evergreens. Flowering Shrubs, Gooseberry and Currant bushes, Grapevines, Hedge plants, Raspberries, Strawberries, &c.

The Trees are of large size, thrifty growth, and well rooted, and can furnish nearly all the new varieties ordered, and will sell at the lowest market prices.

Ornamental trees being grown extensively, can be furnished by the hundred at very reasonable rates. European Linden, Mountain Ash, Scotch Elm, English Elms, English Sycamore, Weeping Willow, with a good collection of Roses, Green-house plants, &c., all which can be supplied in quantities to suit purchasers. Catalogues will be forwarded to all applicants.

H. SNYDER,
Feb. 1—2t. Nurseryman, Kinderhook.

French Quince Cuttings.

I CAN furnish from ten to fifteen thousand thrifty cuttings from imported quinces, at $2 per 1,000, at Walworth Nurseries.

Walworth, N. Y., Feb. 1, 1852—2t.* T. G. YEOMANS.

For Sale,

A THOROUGH bred Devon Bull. He has been exhibited at "*three*" agricultural fairs, and has taken the first premium at each. He is a very superior animal, and will be three years old next month.

THOMAS HANCOCK,
Feb. 1, 1852—3t. Ashton Nurseries, Burlington, New-Jersey.

Fruit and Ornamental Trees.

ELLWANGER & BARRY beg to remind those who intend to plant next spring, that their stock of
Standard Fruit Trees for orchards,
Dwarf Fruit Trees for gardens,
Ornamental Trees for Streets, Parks, Gardens and Pleasure Grounds; *Roses*, &c., &c., is very large, and offers great inducements to those who want first rate articles.

The *Descriptive Catalogue*, sent gratis to all who apply post-paid, and remit stamps for postage, which must now be prepaid. Five cents 500 miles or less, ten cents over 500 and below 1000.

☞ See other advertisement.

Feb. 1, 1852—2t. Mount Hope Nurseries, Rochester, N. Y.

Fowls and Eggs.

VERY handsome specimens of the Albany Dorking, Black Poland, and Silver Spangled Poland are for sale by the subscriber. Also, eggs of the above and the following varieties:—

Shanghae, Perly stock.
Santa Ana, game.
Golden Poland.
Java Bantams.

The above may be relied upon as genuine. E. E. PLATT.
Albany, Feb. 1, 1852—2t

NEW AND VALUABLE PLANTS,

For the Nursery, Garden, and Pleasure Grounds.

B. M. WATSON, Old Colony Nurseries, Plymouth, Mass., offers for sale a very complete assortment of Trees and Plants of every description, of which a priced Catalouge will be sent post paid, to all applicants. See also advertisement in detail, in the February, March and April numbers of the Horticulturist. Feb. 1, 1852—1t.

Warren's Improved Portable Horse Powers and Threshers.

THE undersigned continue to manufacture and sell these celebrated machines, and experience has proved that the FOUR HORSE POWER MACHINES have given universal satisfaction without a single exception.

The four horse power may be used with one to four horses—and experience up to this time has proved that there are no Horse Powers and Threshers so cheap to the purchaser as these.

Price of Four Horse Power alone,..........	$75 00
" of " " Spike Thresher,..........	30 00
" of 40 foot Band 3½ inches wide,..........	5 00
Terms Cash.	$110 00

P. S.—Orders for any kind of Agricultural Implements and other merchandize, will also be promptly attended to.

Edw. Plant, } PLANT, BROTHERS, Com. Merchants,
Jas. Plant, } Feb. 1—2t. 146 William st., New-York.

Choice Seedling Potatoes,

AS USUAL, for planting; also their seed from the balls.

Buffalo, Feb. 1, 1852.—1t. N. S. SMITH.

CHOICE FOWLS.

SEVERAL varieties bred from the best specimens of the late imported Stock from the Eastern Market. Cochin China, Imperial Chinese, Brahma portu, China Dorking, and others.

Buffalo, Feb. 1, 1852.—1t. N. S. SMITH.

Field and Garden Seeds.

WE have recently imported, from England, France, and Germany, and have grown in the United States expressly for us, a fine assortment of the best and most approved kinds of FIELD and GARDEN SEEDS.

Agricultural and Horticultural Implements, a large assortment of the various kinds suitable for North and South America.

A. B. ALLEN & CO.,
Jan. 1, 1852—tf. 189 and 191 Water-st., New-York.

N. YORK AGRICULTURAL WAREHOUSE.

A. B. ALLEN & CO.,

189 *and* 191 *Water Street, New-York.*

PLOWS of a great variety of patterns and different sizes, calculated for sward and stubble land, wet meadows, and recently drained swamps where roots abound. Among these plows, also are the deep-breaking-up, flat-furrow, lap-furrow, self-sharpening, side-hill, double-mould-board, corn, cotton, cane, rice, and subsoil with single or double wings.

HARROWS, triangular, square, Geddes, and Scotch.

ROLLERS, with iron sections one foot long, and of different diameters. These can be arranged on an iron shaft for any required width.

CULTIVATORS of upwards of twenty different kinds, steel tooth and cast iron.

SEED SOWERS of six different kinds and prices.

HORSE POWERS, endless chain and circular, of wood and cast iron.

THRESHERS, with or without Separators.

GRAIN MILLS of cast iron, and burr stone, to work either by hand, horse or water power.

CORN SHELLERS, single and double, large and small cylindrical to work by hand or otherwise.

STRAW CUTTERS, spiral, straight, or circular knives.

VEGETABLE CUTTERS for turneps and other roots.

Together with a great variety of all other Agricultural and Horticultural Implements kept in the United States, such as Hoes, Shovels, Spades, Rakes, Manure and Hay Forks, Grain Cradles, Scythes, Snaths, &c. &c.

CASTINGS of all kinds for Plows, Cotton Gins, and Sugar Rollers.

WAGONS and *CARTS*, for horse, ox, or hand.

STEAM ENGINES for farm and other purposes.

Our implements occupy three large stores, and we believe they make up the largest and most complete assortment in America. In addition, we have a machine shop employing upwards of one hundred men, where any articles in our line can be made to order.

A. B. ALLEN & CO.,
Jan. 1, 1852—tf. 189 and 191 Water st., New-York.

THE CULTIVATOR

Is published on the first of each month, at Albany, N. Y., by

LUTHER TUCKER, PROPRIETOR.

$1 per Ann.—7 Copies for $5—15 for $10.

☞ All subscriptions to commence with the volume, (the Jan. No.,) and to be PAID IN ADVANCE.

Advertisements.—The charge for Advertisements is $1 for 12 lines, for each insertion. No variation made from these terms.

C. F. Norton

THE CULTIVATOR.

TO IMPROVE THE SOIL AND THE MIND.

New Series. ALBANY, MARCH, 1852. Vol. IX.—No. 3.

The "Long Pasture."

Country residents may be divided into two classes—the neat, and the slovenly. Specimens of the former may be known on approaching their dwellings, by the air of finish and comfort which pervades the premises—the whole indicating, that the man who has mastered one art, does not find it hard to master another,—or, in other words, if he will not allow the intrusion of mullins and pig-weeds among his crops, neither will he permit the defacement of his door-yard by old rubbish in its countless forms. Of the latter class of residents, the indications are various. Sometimes they consist in a broken fence bordered with an unbroken hedge of briers, elders, and thistles—at others, the yard, which might have been a neat lawn with shady trees, is mostly occupied with burdocks and nettles, bordering old decaying heaps of chips and pools of kitchen slop, and variously interspersed with old boards, barrel-hoops, and the droppings of cattle, and cut up by the wheels of carts into mud-holes of unknown depth, until sounded in a dark evening, by the unwary foot of a neighbor's wife or daughter.

There is again an intermediate class—belonging partly to both the preceding—we are by no means sure that they are not the largest class of all, in many districts of the country. Over these, neatness and disorder seem to hold each a sort of doubtful jurisdiction—sometimes the one, and again the other, obtaining the ascendancy. Perhaps a neat "picket" fence in front, has its counterpart in a decayed rail fence in the rear; or a flower-bed by the parlor door, has its off-set in a puddle of soap-suds at the kitchen door; or the odor of June roses under the windows, may be curiously mingled with breezes laden with the perfumes of the hog-pen. Now, such of this intermediate class, as have no desire for improvement, and who regard the economy of an adulterated neatness as a chimera, will naturally fall under the same head as the slovenly. For these the following remarks are not intended, and they will therefore, if they have read thus far, please skip the rest. But those who really love neatness and order, though they may not have attained it fully, will be likely to appreciate our intentions, in endeavoring to assist in the removal of the very common evil, namely, that of converting our public highways into promiscuous pasturage for cattle, colts, sheep, hogs, and web-footed poultry.

The evils of this practice are interminable. A friend informs us that he finds it next to impossible to preserve the contents of his garden from his neighbor's swine, which have become skilled in all branches of the art of squeezing through small spaces, crowding rails and boards asunder, and burrowing under fences. Another lost, not only some choice young pear trees, but several beautiful and costly imported evergreens, devoured by the street cattle passing through the gate accidentally blown open by the wind in his absence. Why should any one own a cow, when he has nothing wherewithal to give her? Yet we have known those who had several, depending entirely on their skill to pick their own living in the streets,—which they did by variously snapping boards and entering meadows, vaulting into corn-fields, or watching with surprising keenness till some one thoughtlessly opened a gate for a few seconds, when they would rush in. Heavy and expensive fences were kept up by an acquaintance; but he was compelled, for the sake of maintaining a decent appearance in the road by his house, to "remove the deposits" daily, left by street cattle, who found his shade trees the most convenient places in the world for repose; and not unfrequently swine, after throwing up the turf into every imaginable irregularity, also sought repose in the same comfortable shadows. These evils have become so common in most places, that they are submitted to as a sort of necessity,—as an essential share of the evils of this life, without an inquiry into the possibility or expediency of their removal.

It has been asserted that "no man has a moral right to keep more stock than he can feed well on his own land." But if the cottager must have his cow kept by the public, and every thing is to be turned to profit, would it not be quite as profitable to convert the road-side into meadow, to be mowed annually for wintering the cows of poor men, and save us from all the evils of street maurauders, and frequent five-mile journeys by their owners in search of them. We throw this out merely as a hint to those who measure everything by dollars and cents.

We may also add, for the same class of calculators, that the amount of time and attention consumed in opening, shutting, and watching gates—the amount lost by the plunderings of half-starved street-cattle—the enormous expense of heavy street-fences,—not to *keep in* the farmer's own stock, but to *keep out* his neighbor's—constitute altogether a most formidable tax, which if imposed by government, would be regarded as insufferable.

As to the *practicability* of the proposed improvement,—the people of Massachusetts, and some other portions of New-England, have furnished the proof. We have travelled days together in that highly cultivated state, without ever seeing any kind of animal at large. In Brookline, which has no equal in America for the continued succession for miles, of its cultivated landscape beauty, one may see gates open from the street into the most finished and costly grounds, without the least fear of injury from without, and indeed some of the newer residences have no gates at all.

We have been gratified with the late decision of the Supreme Court of Michigan* on this subject—not as containing any new principle of law, but as opening the subject to public attention. Horses, running at large, were killed by a passing train of cars, and in an action against the company, the owner failed to recover damages. The court, after alluding to the township regulation of making horses *free commoners*, remarks:

"The idea that because horses and cattle are *free commoners*, that therefore they have the lawful right of trespassing on private property is absurd—preposterous in the extreme. What are *free commoners?* Where may they run? In Holliday *vs.* Marsh (3 Wend. R. 147) the Supreme Court says, 'Suppose a case where a town has no *common land*, and they pass a by-law permitting cattle and horses to run at large, *where are they to run?* Surely not on individual property. Where then? In the highway? The public has simply *a right of passage over the highway*. The owner of the land through which the highway passes, is the owner of the soil and the timber, except what is necessary to make bridges, or otherwise aid in making the highway passable, and if the owner of the soil owns the timber, why not the *grass?*' The doctrine established by this decision is in accordance with a fundamental principle of the common law, which has been recognized by elementary writers, and judicial decisions in England and this country for a great length of time. Though every highway is said to be the King's, yet the King has nothing except the right of passage for himself and his people; the freehold of all the profit, as trees, &c., belong to the lord or owner of the soil, who may have action of trespass for digging up the ground of the highway."

According to this decision, every land-owner has a right to the grass in front of his own land, and he may pasture his cattle there, provided he keeps them from wandering on his neighbor's part of the road.

As a successful experiment in this reformation, we quote A. J. DOWNING's account of the effort made at Newburgh, his residence, given in the Horticulturist:

"That it is only needful for a few good citizens in every town to look at the matter clearly, and determine to have orderly and sanitary laws like these enforced, we have had abundant proof in the town where we live—which is, so far as we know, the only one in the State of New-York where animals are not joint-stock possessors of all the streets and highways. Eight or ten years ago, Newburgh, which has a population of nine thousand inhabitants, was one of the least cleanly and orderly towns in the North. Droves of hogs, cows and geese ran at large everywhere, and the possessor of a garden or even of a bit of sidewalk was always liable, night and day, to the nuisance and annoyance of numbers of these commoners. At length it was determined by a few of the more orderly inhabitants, to endeavor to have enforced the law for pounding animals. The trustees of the village doubted the possibility of enforcing the law, and faltered in their duty. At the next election, however, the hog-law was made the test, trustees favorable to its execution were elected by a large majority, notwithstanding a fierce opposition. When the law was enforced, so strong was the feeling of resistance, that the public pound was several times broken into at night, and the animals released. But the orderly part of the community stood firmly by the authorities, and the latter did their duty, until the law triumphed. After much grumbling on the part of many who imagined that they had a clear right to prey upon the public in this manner, a general acquiescence came about. And now for five years we have had cleanly streets, free from all animals of all kinds, and such an air of neatness and rural beauty has sprung up, that the place has almost changed its character. The carriage-gates of grounds, like our own, which, under the old system of things, needed almost an armed huntsman to keep out the brute population, are now wide open day and evening, without the brute population, are now wide open day and evening, without the least plant suffering depredation; and what is the best part of the story, so completely has the feeling of better civilization triumphed, that it would, we imagine, be very hard at the present moment, to persuade the population of this town to return to the old condition of streets, overrun with unclean beasts."

◆

Thoughts on Manures, Special and General.

It is quite common for farmers, when conversing about any particular manure, to ask—"is it a permanent manure?" "How long will it last?" &c. &c., implying a belief that a substance may be in a state of continual exhaustion, and yet never exhausted. Such questions are most common in relation to guano. Now it would seem to the writer that we all misunderstand the true nature of manure and vegetable nutrition generally. The growth of a vegetable must be at the expense of the vegetable nutrition in the soil. When this is exhausted, the soil becomes barren, so far as that particular vegetable is concerned; and at last barren to every description of vegetables—as is most lamentably demonstrated by the numerous fields of "worn-out" lands in all the middle and southern states. Now if this be so, the manure we apply to the soil is the food upon which the growing crop lives and grows; and if this be so, what are called "permanent manures" are very undesirable, even if there were any such things; because it would be folly to expend money and labor in applying manure that would make no return for five or ten years. We all want that which will make the quickest return for our money and labor, and hence we should apply the manure that will be all used up in a single year, if we can get it. For example, suppose we apply a manure in sufficient quantity and of a quality to last five years, do we not invest money and labor that will make us no return probably the first year, and only one-fourth the second and each future year? Is it not better to use that kind and that quantity that will all be used the first year? The improvement of lands is not now the question. Bringing sterile lands into a state of fertility is a very different subject. The matter in hand relates to the policy of investing money and means that are to make no return for several years hence, instead of that which looks to a prompt return of profit on the investment.

The writer has often been amused with the theories of writers on the subject of manures and vegetable nutrition. Many eminent men have advanced the idea that vegetables derive most, or a large portion of their food from the atmosphere. To demonstrate the incorrectness of this idea, we have only to suppose a case. Suppose we select a sterile spot in the middle of the richest prairie of the west, and in that spot plant corn or any other vegetable. What advantage will the atmosphere, which is charged with the exhalation of fifty thousand acres of prairie land, be to that corn? Will it make it grow or produce grain? The truth is, the atmosphere has the same influence on vegetable, that it has on animal nutrition—no more, no less. The nutrition is taken from the soil, conveyed through the ascending sap vessels to the leaves, in the surfaces of which it is exposed to the action of the carbonic acid and nitrogen in the atmosphere, which prepares it for the appropriation of the plant to the formation of wood, fruit, &c.

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* As given in the Michigan Farmer

Another error is very general in the agricultural world. It consists in supposing that any single element of vegetable nutrition constitutes a manure. Hence plaster of Paris, lime, salt, ashes, potash, soda, &c., all have their advocates as manures, in the proper sense of the term. Now none of these can be manure; they each form one of the elements or serve to produce one of the components of manure. If a soil be deficient in potash, or lime, &c., and possesses all the other elements of vegetable nutrition, then the application of a proper quantity of the deficient element will render the soil fertile. Some of these articles, besides themselves entering into the nutrition as an element, by combining with or acting chemically upon other elements, that had remained inactive in the soil, render them also nutritious, and hence perform a double duty. This is conspicuously the case with lime. A soil may be abundantly supplied with every kind of vegetable matter in a dormant state. It is sterile, or productive only of rank weeds. The application of lime immediately cures the defects of this soil, by causing the decomposition of the crude vegetable matter, and thus rendering it proper food for plants, and by itself also becoming one of the elements of that food. Still, lime cannot be properly called manure. Plaster of Paris, (gypsum) is supposed to act also a double part; first as a stimulant to the action of other elements; and second, by combining with ammonia, fixing it, and gradually giving it up to form another element of food. If *salt* (common salt, chloride of sodium) is ever beneficial to a soil, it must be from the action of its chloric acid upon some previously inactive element, and by the combination of its soda with the silica of the soil, both of which effects are sometimes required no doubt; but the difficulty will be to ascertain what lands do require these actions. The presence of potash in all soils is generally sufficient for the necessary supply of silicate of potash for the growing crop, and then the silicate of soda is not wanted. What combination the muriatic acid, (Hydrochloric) may effect, I am not prepared to say. It may, by combining with one of the elements of some compound in the soil, set free another element which becomes a portion of the food of plants.

Good horse manure and guano, in my opinion, are the only real general manures, applicable to all soils and all crops. They each contain all the elements of nutrition in proper proportions for immediate use by plants. I have said they are applicable to all soils; of course I mean to all soils that require manure. It would be folly to apply either to a soil already surcharged with nutrition. And we have all seen soils that were not benefitted by either of them. The reason is, they already possess too much of nutritious matter; they are unable to *digest it;* they require *a remedy for dyspepsia.* Generally a free application of lime to such soils will render them highly fertile. It seems to stimulate the digestive powers of the soil, and then to render them capable of preparing the crude matters contained in it as food for plants.

The reader will see by these reflections, that special manures, or, more properly, single elements of manure, can rarely be depended on for profitable application. Plants cannot live on lime alone, any more than man can live on bread alone. There is one element, however, of vegetable nutrition, that approaches nearer to the character of true manure than any other except guano and stable manure. I refer to water. It is a necessary element in all fertile soils, and without it, of course, no manure would constitute food for plants. In some countries no other is used. But, if a soil be absolutely deficient in real nutrition, water will be found utterly incapable of affording it. It is merely a solvent of other matters, and a vehicle for their conveyance to their appropriate places in the plant. *

Agriculture of Putnam County, N. Y.

At a meeting of the Putnam County Ag. Society, on the first Wednesday of January, for the purpose of awarding premiums on grain crops, the following awards were made:

On Corn—1. To Jno. M. Towner, of Patterson, for 87 bushels of shelled corn, raised on one acre of land—2. To Nathl. Cole, of Putnam Valley, for 74 bushels shelled corn, raised on one acre of land.

On Oats—To Nathl. Cole, Putnam Valley, for 61 bushels oats, raised on one acre and six rods of lands.

On Rye—To Ezekiel Hyatt, Putnam Valley, for 95 bushels, raised on three acres, two roods, and eight perches, being at the rate of 27 bushels per acre.

The kind of corn raised by Mr. Towner, was that known as the *little Dutton,* principally an eight-rowed yellow. That raised by Mr. Cole, was a variety of eight-rowed white corn.

The statements of all the competitors were given under oath, and accompanied by statements of surveyors, &c., also under oath. All the requirements of the Society were fulfilled, leaving no room for doubt in the minds of the incredulous. Considering the past dry season, we think the yields large.

The nett profit on Mr. Towner's acre of corn, after deducting all expenses, interest on land,&c.,was....$55 25
On Mr. Cole's acre of corn,.................... 47 20
On Mr. Cole's acre of oats,.................... 19 52
On Mr. Hyatt's acre of Rye,................... 11 00
Yours truly, H. C. W.

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Knife Sharpening.—The Prairie Farmer says that a newly constructed *steel* or knife-sharpener, is coming into use. " It consists of two small, thin, bevel-edged pieces of very hard steel, placed in a handle, in the shape of the letter X; the knife is sharpened by drawing its edge *once* down the crack made by the crossing pieces."

Destruction of Quack Grass.

Eds. Cultivator—From a digger in the *Placers* of California, I have become a digger of the soil—having exchanged some of the *dust* of the former region, with the small profits and honors of a profession, for a few " broad acres" in the neighborhood of this city. Some of the results of my present occupation, I propose to place at your disposal, to publish or not, as you may deem proper.

In my selection, I have purchased what was considered the *tail-end* of a large farm, a full half of which had become nearly unproductive, except of every kind of foul vegetable growth; and the balance, save a half dozen acres, so filled with *quack*, as I afterwards learned, that little else could be produced, and which was given as a reason, by a former owner, for a sale of the premises. The selection was made, not from a quixotic agricultural disposition to wage a weedy warfare " for the love of it," but on account of the *natural* characteristics of the soil, being mainly of a fine sandy and gravelly loam, *with a free subsoil of several feet in depth.* The one I deemed as an accidental evil, resulting from bad husbandry, and easily remedied; the other, as a quality of the first importance, and where wanting, not readily or cheaply created. A half dozen acres of bottom land, bordering the creek, added, producing annually a most luxuriant growth of golden rod, wild parsnep, &c., with patches of blue flag, constitute my " small farm" of 30 acres. Having thus made you acquainted with the conditions, I shall proceed now or hereafter, with practices and results, successes and failures. And first:

The Cultivator vs. *Quack and Counsel.*—Intending to engage somewhat in the culture of tobacco—comparatively a new staple for this county, a field of five acres was selected as the best on the premises, the crop requiring rich, as well as other conditions and peculiarities of soil. This field had been manured with a liberal dressing for a single season, seven or eight years ago, when it was put into corn. Subsequently it had been constantly under the plow, and croped with wheat and oats. The last year's crop of spring wheat, was light. I commenced by clearing a portion of the field of cobble stone, which covered no inconsiderable portion of the surface, and which had been plowed in and out for 40 years. The latter part of April, the plat was plowed to the depth of seven or eight inches, generally bringing up a small portion of the sub-soil, and following with a sub-soil plow, the earth in the mass was loostened to the depth of 12 or 14 inches. The field was well harrowed and left at rest till the first of June. In the interim the *Quack*, which in many places at the plowing formed a stiff turf, sprung up with luxuriance, and covered the surface like a field of grain. A legal friend who happened to view the premises in this condition, expressed a *private* opinion that I would not be able to raise a crop, and gave a *professional* one, that I could sustain a suit for damages against my grantees for selling the premises without notice of the existence of this troublesome occupant of the soil. Thinking, however, that half the amount of a counsel fee would procure a good two horse wheel *cultivator*, and that the latter would be the best quack exterminator, (literally, if not in a double sense,) such an implement was procured. The season for planting out having arrived, the field was covered with about 20 one horse cart loads of manure to the acre, evenly spread and cultivated in, while at the same time the *quack* was cultivated *out*—gathered into winrows by a wire tooth horse-rake, and carted off the field. This process was repeated, crossing the field diagonally—and the late green field exhibited scarcely a live blade. The only extra labor, properly, being the carting off the roots, as the use of the cultivator was necessary to the proper covering and incorporating the manure with the soil, pulverizing, &c., while the rake served as a good substitute for the harrow, leveling the surface well, and more expeditiously, preparatory to working. Nor has the carting off the roots proved any loss of labor, as they have doubly paid the expense as food for swine, and the manure into which they have been converted. *En passant;* this may afford the material for a chapter on the manufacture of manure, in a future article; as its incorporation with the soil by means of the cultivator, will another. The present is with the quack, and its exterminator. The after treatment of the field was but that common to the crop, which suffered nothing from the former almost sole occupant of the soil. Some broken and scattered roots remain; but which, it is believed, a repetition of the process for a season or two, will entirely remove. The crop was pronounced to be unusually fine—" one of the best in the county." Had the field been prepared merely by plowing and harrowing, I have some reason to know it would have proved nearly or quite a failure; but of this, in the history of another crop—a failure. Yours, Ra-ab Shagy. *Syracuse, Jan.* 1851.

P. S. I am quite well satisfied that the *sub-soil* plowing was highly beneficial to the crop above referred to.

Fruit Destroyed by Rose-Bugs.

Eds. Cultivator—For the last four years we have been afflicted with a bug called the rose bug, which has nearly destroyed our fruit of most kinds, such as apples, peaches, and cherries. Can some one tell us whether it has ever appeared in any other section of country in such formidable manner—and if so, what number of years has it been troublesome, and what has been done successfully to save fruit from its ravages.

It is a small striped bug, very generally known; makes its appearance about the 18th of June; remains about 20 days; is very ravenous; appears to come from the ground like the locust, and again to descend to the earth and disappears. Respectfully yours, David J. Beardsley. *Freedom, Portage county, Ohio, Nov.* 10, 1851.

Having no minute personal acquaintance with this insect, we can only give the observations of others, and we hope some of our correspondents who may be familiar with it, will furnish additional particulars. Dr. Harris gives the following description of the habits of the rose-bug, (so called,) the *Melolontha subspinosa* of Fabricius:

> "For some time after they were first noticed, rose-bugs appeared to be confined to their favorite, the blossoms of the rose; but within thirty years they have pro-

digiously increased in number, have attacked at random various kinds of plants in swarms, and have become notorious for their extensive and deplorable ravages. The grape-vine in particular, the cherry, plum, and apple trees, have annually suffered by their depredations; many other fruit trees and shrubs, garden vegetables and corn, and even the trees of the forest and the grass of the fields, have been laid under contribution by these indiscriminate feeders, by whom leaves, flowers, and fruits are alike consumed. The unexpected arrival of these insects in swarms, at their first coming, and their sudden disappearance, at the close of their career, are remarkable facts in their history. They come forth from the ground during the second week in June, or about the time of the blossoming of the damask rose, and remain from thirty to forty days. At the end of this period the males become exhausted, fall to the ground, and perish, while the females enter the earth, lay their eggs, return to the surface, and, after lingering a few days, die also. The eggs laid by each female are about thirty in number, and are deposited from one to four inches beneath the surface of the soil; they are nearly globular, whitish, and about one thirtieth of an inch in diameter, and are hatched twenty days after they are laid. The young larvæ begin to feed on such tender roots as are within their reach. Like other grubs of the Scarabæians, when not eating, they lie upon the side, with the body curved so that the head and tail are nearly in contact; they move with difficulty on a level surface, and are continually falling over on one side or the other. They attain their full size in the autumn, being then nearly three quarters of an inch long, and about an eighth of an inch in diameter. They are of a yellowish white color, with a tinge of blue towards the hinder extremity, which is thick and obtuse or rounded; a few short hairs are scattered on the surface of the body; there are six short legs, namely a pair to each of the first three rings behind the head; and the latter is covered with a horny shell of a pale rust color. In October they descend below the reach of frost, and pass the winter in a torpid state. In the spring they approach towards the surface, and each one forms for itself a little cell of an oval shape, by turning round a great many times, so as to compress the earth and render the inside of the cavity hard and smooth. Within this cell the grub is transformed to pupa, during the month of May, by casting off its skin, which is pushed downwards in folds from the head to the tail. The pupa has somewhat the form of the perfected beetle; but it is of a yellowish white color, and its short stump-like wings, its antennæ, and its legs are folded upon the breast, and its whole body is enclosed in a thin film, that wraps each part separately. During the month of June this filmy skin is rent, the included beetle withdraws from it its body and its limbs, bursts open its earthern cell, and digs its way to the surface of the ground. Thus the various changes, from the egg to the full development of the perfected beetle, are completed within the space of one year.

Such being the metamorphoses and habits of these insects, it is evident that we cannot attack them in the egg, the grub, or the pupa state; the enemy, in these stages, is beyond our reach, and is subject to the control of the natural but unknown means appointed by the Author of Nature to keep the insect tribes in check. When they have issued from their subterranean retreats, and have congregated upon our vines, trees, and other vegetable productions, in the complete enjoyment of their propensities, we must unite our efforts to seize and crush the invaders. They must indeed be crushed, scalded, or burned, to deprive them of life, for they are not affected by any of the applications usually found destructive to other insects. Experience has proved the utility of gathering them by hand, or of shaking them or brushing them from the plants into tin vessels containing a little water. They should be collected daily during the period of their visitation, and should be committed to the flames, or killed by scalding water. The late John Lowell, Esq., states,* that in 1823, he discovered, on a solitary apple-tree, the rose-bugs "in vast numbers, such as could not be described, and would not be believed if they were described, or, at least, none but an ocular witness could conceive of their numbers. Destruction by hand was out of the question," in this case. He put sheets under the tree, and shook them down, and burned them. Dr. Green, of Mansfield, whose investigations have thrown much light on the history of this insect, proposes protecting plants with millinet, and says that in this way only did he succeed in securing his grape-vines from depredation. His remarks also show the utility of gathering them. 'Eighty-six of these spoilers,' he says, 'were known to infest a single rose-bud, and were crushed with one grasp of the hand.' Suppose, as was probably the case, that one half of them were females; by this destruction, eight hundred eggs, at least, were prevented from becoming matured."

The insect known as the rose-bug has lately become almost overwhelming in its numbers throughout considerable portions of the western states, and where, as sometimes happens, whole forests appear to be swarming with them, it is somewhat puzzling to say what we shall do with them. Whether the insect spoken of by our correspondent be same as the preceding, we are unable to say, in the absence of a specimen, or a full description. Dr. Harris describes the rose-bug of the eastern states as seven-twentieths of an inch long, slender, tapering before and behind, the thorax long and narrow, widened to a point on each side; legs slender, pale red; joints of the feet tipped with black, and very long, which caused Latreille to call the genus *Macrodactylus*, that is, long footed. The body is covered with very short and close ashen-yellow down.

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Deep Plowing

"How does deep plowing improve the soil?" asks an inquiring farmer. The simple answer is, by increasing its depth. "But," says the inquirer, "if I plow deep I shall turn up the clay and inert earth that contain no nourishment for plants." Well, if clay and inert earth, containing no nourishment for plants, lie so near the surface as to be within reach of your deepest working plow, they ought to be turned up and exposed to the influence of sun, air, frost, rain, snow, and manure and cultivation, that they may become rich. "But," says inquirer, (it is strange how many "*buts*" such people can find for use on such occasions,) "it would require too much hard work and too long a time to do this, would it not?" That depends upon whether you would prefer five dollars profit per acre now, and forever hereafter, to two or three dollars *now*, this year and next, and ten or twenty dollars per acre hereafter. VERB. SAP.

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Agricultural Economy.

The ecomical farmer will be careful to select such tools and implements, as will require the least labor to perform the greatest amount of work. Two plows for example, of the same size, working the same depth, and turning the same width of furrow, may require very unequal forces to work them, the one requiring but 400 lbs. traction, the other 600 lbs., and this would be equivalent to two horses for the one, and three for the other. Most farmers understand this perfectly, and some attend to it in selecting their plows; but any one can easily see on looking at the plows generally used, that many neglect it altogether.

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* Massachusetts Agricultural Repository, vol. IX, p. 145.

Management of Young Calves.

Every one who has spent a single season in the country must be familiar with that peculiar rural music, the bellowing of a discontented young calf—a music not of the most agreeable sort, indicating as it does, that the little fellow is "ill at ease" in some way or other. It is worth while to inquire into the cause of this discontent, for a young animal cannot be expected to stand and bawl for two hours together, without wasting, through such an amount of breath, noise, and effort, a considerable portion of flesh, to say nothing of the real physical suffering which must cause these incessant complaints. We cannot but think that calves generally are doomed to a position too much like that of young children,—that is, they are regarded as too small and insignificant a race of animals to merit much attention from grown-up persons with wise heads. For as children are not unfrequently kept in the nursery under the care of those who would not be entrusted with the care of monied concerns,—or sent to school, to have their new-born intellects moulded by "the cheap schoolmaster," whom their parents would not suffer to have charge even of a favorite horse,—so in like manner young calves are shut up or tied up in some comfortless out-house, where they receive a few minutes attention in feeding, twice in the space of twenty-four hours. It may be useful to examine a little in detail the proper mode of treating them, as they are to constitute the future millions of the cattle of our country.

Nature points out most distinctly that the young animal must at first be allowed to thrive only on the rich nutriment furnished by the fresh milk of the cow. The practice of separating the two wholly and at once, is unnatural and severe. The best mode undoubtedly is to give new milk for at least two weeks, and some excellent managers prolong this period to a month, the calf sucking the cow at regular and stated times. When this period terminates, and a change of food is about to be made, let this change in all cases be *gradual*, for sudden transitions are always attended with more or less hazard or loss; for a single check in advancing growth, is like a check in the growth of a young apple tree, or transplanted tomato plant,—not quickly got over. As soon as the calf has learned to drink new milk, (which is done by drawing its mouth into the vessel while sucking the finger,) let a small portion of warmed skim-milk be added; this may be daily increassd until in two or three weeks more the whole food becomes skimmed milk. It will not be long after this, that eating solid food may be commenced. This is sometimes taught by suspending within reach a piece of fine hay tied together with a string, which the calf begins upon by sucking, and afterwards by eating the small portions that become detached.

For the sake of economy, it becomes desirable to discontinue gradually the milk. At first, flour porridge is one of the best things that can be given. The mode of preparing it, is not unlike that for painter's paste; that is, let a pint of flour be mixed with water, in such proportions as to form it into a consistency of thick cream. Then add gradually small portions of boiling water, stirring it to prevent the formation of lumps, until about two gallons have been added. Then apply heat enough to coagulate the whole mass into a thick nutritious porridge. When first given to the calf, it should be made by mixing with the water, considerable portions of skimmed milk, which is afterwards gradually lessened in quantity till none is used. This mode of cooking the flour, instead of mixing it cold, not only makes more agreeable food, but greatly increases its nutritive effects. After a short time, coruel or fine "middlings," may be substituted for flour, over which they possess some advantages in the quantity of gluten or muscle-forming elements they contain, as well as in cheapness. Bean meal has been proposed as the best means of restoring the casein of the milk, but we need experiments on its value.

As soon as fresh pasture is at hand, and milk is withheld, calves soon learn to feed upon grass; but he who expects to see fine, thriving, vigorous, square bodied young animals, must continue also the artificial food just described for a long period; and especially the first winter must not be a season of neglect.

A correspondent of this journal described some years since, an effectual mode of weaning calves without permanent separation from the cow, and obviating the melancholy lowing of the cow and the incessant bleating of the calf, usually for a long time attendant on this process. As soon as the young animal has learned to eat and drink, he is furnished with a leathern halter-head, through the nose-piece of which are driven eight or ten well sharpened ten-penny nails, pointing outwards. The cow and calf are then brought together, and he makes a plunge for the inviting udder; but the moment she feels the sudden impact of this strange chevaux-de-frise, she wheels quickly about, and informs the little fellow that such pointed jokes will never answer, and after a few unsuccessful attempts he is compelled to give up the chase. In the course of a week, if both run together, all danger is at an end, and no subsequent arrangement is required for separate pastures or separate yards. Ten-penny nails are the shortest that will answer for the successful application of this treatment.

No argument is needed for the intelligent reader, to prove how much better a clean, comfortable and well littered place of rest is, than one that is dirty, offensive, and comfortless; nor how much better it is to allow some little exercise to bring the growing muscles into play and healthful growth, than by tying him fast to prevent all movement of his limbs, like the prisoner in his cell; nor to show the vital importance of regularity in meals, even to a minute of time, in order to avoid the fretting and waste of flesh inevitably incident to "hope deferred," when feeding time has arrived, and which all animals measure with great exactness by their alimentary chronometer.

There is one other important item in their treatment, which is very commonly left out in practice. This is, feeding often, and in small quantities at a time. We know many pretty good farmers, who after having allowed their calves to distend themselves freely about sunrise, compel them to fast fourteen hours before another meal is given at sunset. The result is, they spend from two to four hours as the evening approaches, in incessant and pitiful bawling, in obedience to the gnawings of a hungry stomach. What would be thought of the man who should treat his horse, a hardier animal in the same way? Some of the most successful stock raisers, for the first fortnight, feed their calves at least four times a day, and in moderate quantities, with the best results. In short, the whole treatment may be summed up briefly in a very few words, namely, by a careful and strict attention to all the wants of nature, without forcing, over straining, or stinting any, to keep the young and growing animal at all times in a comfortable condition. These things may not perhaps seem to possess the importance we attach to them; but one thing is certain,—the finest and most profitable full-grown cattle can be raised by those only who lay the foundation of their success in fine, healthy, well fed, and well treated young calves, and see that they advance without check to maturity.

Farmer's Gardens.

As a general thing farmers do not provide themselves with good gardens; at least so far as the writer has travelled he has seldom seen what he would call a good garden on farms. The excuse for this neglect is generally the same with all of them—they "have no time to attend to such small matters." And yet it may safely be asserted that an acre of ground appropriated to a good garden, will be more profitable to the farmer than any other ten acres of the farm. The interests of the farmer, the comforts of his family, the good condition and health of his whole household, require such a garden on every farm in the country. And it should be *a garden*, not a mere excuse for one, a mere weedy patch. It should be one, so managed and arranged, that every vegetable of a wholesome quality for human food should be raised in it, in perfection, and at the earliest season. After a winter's diet on solid and generally salt animal food, the human constitution requires the deterging operations of free vegetable and fruit diet; and as a general rule no one can dispense with it safely. Besides this, the natural appetite calls for it, and there are few pleasures that may be so safely and even beneficially indulged in. In the latter part of winter and early spring, measures should be taken to secure *early* vegetables of all kinds capable of very early cultivation. Details will not be expected here; there are other books and papers appropriated to such information; but I cannot help saying that when I am at a farm house, at a season when early peas, beans, cabbages, cucumbers, potatoes, green corn, lettuce, &c., are properly in season, and find none of these luxuries on the table, nothing but the *blue beef*, salt pork, and beans or potatoes of winter, I am free to say I do not envy that farmer's life nor his family their enjoyments. These very people are fond enough of such things when they go to the city, and it is not therefore want of taste. It is simply the fault of negligence. Why may not every farmer in the state have every kind of early vegetables on his tables as early as any gardener near the cities can raise them? There is not a single reason why he should not, while there are a great many why he should. The gardeners have to incur a very considerable expense in procuring *hot* manure for their hot beds, while the farmer has it in his barn-yard. The gardener has everything to purchase, and draw a considerable distance, while the farmer has nothing to buy. The small quantity of lumber required is probably rotting on his premises. It would only be a source of amusement during winter, for him to construct the frame of a hot bed, and prepare the manure and bed for use. Having done this, and got his plants in a thrifty state, he can in a short time, when the season arrives, get his garden ground in order and make his plantations. And then he will have all these vegetable luxuries as early as any of his town friends can purchase them. It only requires a little industry and attention to accomplish this, and as said before, his enjoyment, his health and even his interest, as well as the comforts of his family will be benefitted by it. *

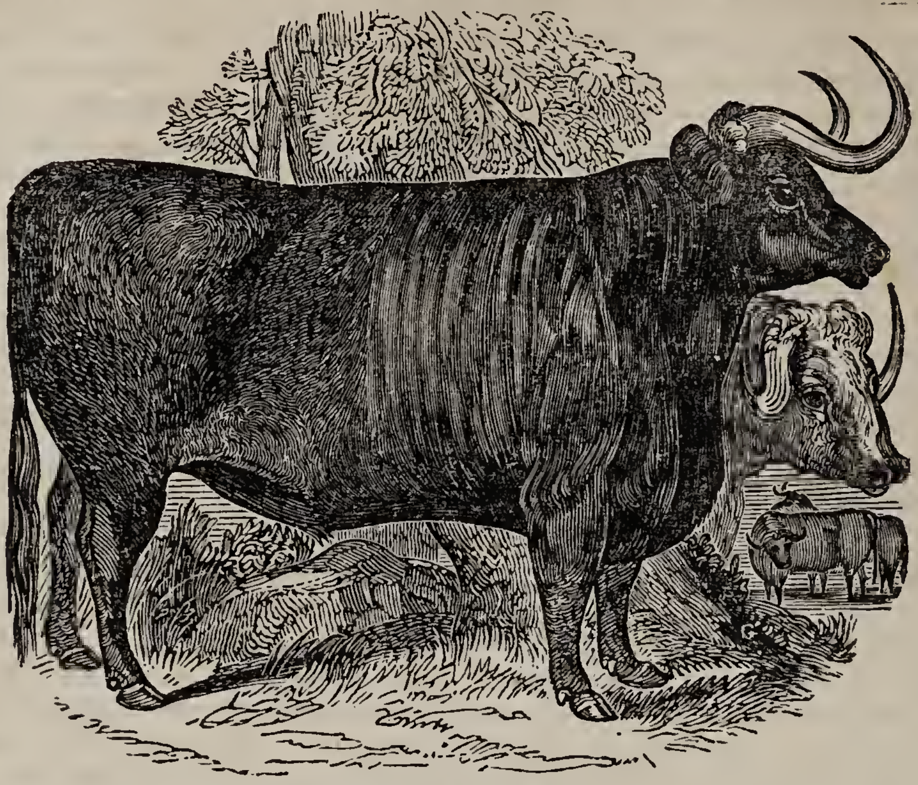
Smoking Meat.

MESSRS. EDITORS—Not a little has been written on the subject of preparing meat, in the best possible manner for domestic purposes, previous to placing it in the smoke house; but little or nothing has been said of the *manner of smoking it*. To appearance, it has been taken for granted, that this process, (so important in itself, and that it be done with care) could be performed by any one, who knows enough to build a fire. Those, who have eaten bacon smoked as it *should* be, and afterwards partaken of that which has been scorched, heat, burned to a crust on the outside, as is too frequently the case with the meat of many people, will readily detect a remarkable difference; and often denounce the *latter* kind, as fit for nothing but soap grease. The process of smoking meat, should never be left with those who have not a faculty of exercising proper care and judgment in this business. It is not necessary that the smoke be *driven in*, by heating the smoke-house like Nebuchadnezzar's furnace, seven times hotter than it ought to be heated; *a smoke, sufficient to fill the space occupied by the meat, is the great desideratum.* Log heaps, back-logs and fore-sticks should be dispensed with, because, after they get once on fire, there will be too great a degree of heat. And besides this, in wooden smoke-houses, there is great danger of setting everything on fire. Such instances I have known to occur; and loss of the meat was the consequence.

The best, most effectual, cheapest and *neatest* manner of smoking meat, that has ever come under my observation, is, to place a shovel of live coals in an old pan, or some low dish, and lay on them a few sugar maple chips. Dry ones are the best, for it requires too much fire to use green ones. No other wood will produce so sweet smoke as sugar maple; and the coals of it will keep alive as long, or longer, than the coals of other wood. In the absence of chips, we use corn cobs, which are nearly as good as chips. Three or four laid on a few coals will produce smoke sufficient, to fill any ordinary smoke house.

As a substitute for a smoke house, we have been accustomed to use a molasses hogshead, covered with boards on the top, and a hole sawed in the side near the bottom, large enough to admit a small pan of coals, with a cob or two, or a few small chips. Thus we avoid all danger of setting fire to the smoke house, and consuming meat and all; and our meat is not "half baked;" but presents a clean, copper colored appearance.

Let those, who have been accustomed to smoke their meat over a log heap, adopt the mode of smoking it gently; and then say which way is the best. Truly yours, S. EDWARDS TODD. *Lake Ridge, Tompkins co., N. Y.*



Shropshire Ox.

The old Shropshire breed of cattle, according to Youatt, were long-horned, hardy, of all colors, but generally brown, mixed with bay and white, with a streak of white running along the back and under the belly; were raw-boned and cow-legged; but were good milkers, and esteemed for the dairy. The Herefords have now taken their place; they occupy the greater part of the grazing grounds, and are occasionally seen in the dairy.

Feeding Cattle for Market.

Editors Cultivator—I notice an inquiry in the Cultivator of this month, from "E. L." of Maryland, as to my mode of feeding cattle, stalls, &c. My stalls are three feet from center of the gate. The gates shut on a girt behind the cattle, against a block spiked on the girt, and the gate fastened by an inch pin put in the girt; the pin hung to the gate by a piece of cord, so that it is always ready. In front two scantlings are framed into a sill, thus, V two feet three inches apart at the top—say six feet in height. The cattle put their heads through at the widest part, and then bring them down to their manger to eat, which should be six inches higher than where their feet stand. The gates are two feet three inches from the floor at the hind end, and within a few inches of the floor at the other end, slanting up to the girt behind. This is in order to give the cattle more room to lay at their widest part, and to prevent their shoulders going through under the gate, is the reason the gates are made near the floor in front. There is no danger of their getting below the gates behind, as cattle always turn themselves straight above their legs before they attempt to rise; and I need not tell a farmer they raise with their *hind* end first. The stalls must not be over three feet wide, and seven feet and a half in length is enough—if wider they will turn in them; as that is sufficient for cattle that will weigh 1,600 lbs. live weight; but I, for some years, have only used my stalls when feeding meal, which I do morning and afternoon. While my cattle are taking their meal, I have their boxes in the yard filled with hay, and when they have eat their meal, turn them out. I have *ample shed room for shelter;* and in this way I find my cattle improve much faster than when they are kept in their stalls all night and the greater part of the day, whatever *science and theory* may say to the contrary. I know that this is the best way, and my doings show proof.

We never had a colder December than the last, and I never saw my cattle do better. I commenced feeding 40 cattle on the 10th November. They went away to New-York market on the 8th of this month, and the drover that bought them was very sure they would be the best in New-York market. None of the cattle were ever in their stalls longer than while eating their meal; my yards and sheds are thoroughly bedded with straw, so that they can either lay in the sheds or yards, as they choose. Except in storms, or very cold nights, I notice they prefer the yards. In this way, my cattle are as clean when they go away, as when they were brought in from the fields in November.

Immediately on selling my last lot, I bought 40 head, and am feeding them in like manner. I am also feeding 160 three-year-old wethers. They have sheds to go under when they choose. I feed the hay in racks in the open yards, and the corn in troughs put up along the yard fence, about one foot from the ground.

With regard to feeding cattle. I feed wholly on oil-cake meal, and corn-meal, fed dry. I feed very light for the first three weeks—say not over two or three quarts per day; after they become used to the feed, I increase it to four, five, six, and eight quarts per day, which is as much as is necessary or profitable, with plenty of good hay, to fat cattle thoroughly in from 80 to 100 days, and it seldom can be made profitable to feed them longer.

I have seen an immense waste of food in feeding in Great Britain. Cattle are shut up in close stone houses, and fed all they will eat, and sometimes for a week at a time, are entirely off their feed. Cattle feeding in this section, is only a new business, and on some farms it is very injudiciously managed. Cattle cannot have too much of the open air, if they have good shelter to go to at pleasure—that, with good hay, and a dry, clean bed, and an average of six quarts of corn-meal per day, will make cattle very fat in from 80 to 100 days. If pretty well forward in condition, they may be fattened in 60 days—but a great deal depends on the breed of cattle. Short-horn, Durhams, and their grades, feed best; the Devons and their grades also feed rapidly, but they don't weigh enough when fat. We have a breed of red cattle, a brighter red than the Devons—longer horns and larger frames, that are excellent feeders. Then we have another breed of red, brindle and black cattle, with coarse, hard hair, thick skins, and noses black, which you may feed three months, and make little improvement. I have made cattle feeding pay for their feed every year, and some years I get great pay. This has been one of those years. True, I do not know, that this last lot I have commenced with, will pay, yet my prospect is equally as good as with the other lot; and although they paid me abundantly, it was readily seen that the purchaser was much pleased with his bargain.

I notice also, in the Cultivator of this month, an English writer wants his fattening cattle to be in a sweat, but not dropping off them. You see how we disagree; but in England they sweat their horse jockeys before great races, in order to *lessen* their weight, and sweat their cattle to make them heavier. *Absurd!* JOHN JOHNSTON. *Near Geneva, Jan.* 20, 1852.

On Raising Horses.

EDITORS CULTIVATOR—The subject of breeding and managing horses, is one of so much importance, that I need make no apology for again presenting it to your readers. This, however, I would not have ventured to do, had not the little work now before me, awakened a new interest in the subject.

The work refered to, is "*The Stud Farm, or Hints on Breeding, &c.*, by CECIL. It appeared in London during the year just closed, and is considered worthy of its popular author. Who that person is I am not informed. The following passage from his preface, will show his claim to the confidence of his readers:

"For more than five-and-twenty years the author of this little work has been engaged in the management of horses—and, as during all that period, he has never neglected any opportunity of acquiring practical information on every point connected therewith, he is not without hope that he may be able to throw out a few hints on this subject, that may be worth the reader's attention."

I propose, in the articles I am to send you, to quote very freely from this excellent work. It contains very many judicious observations, and is evidently the production of a man of good sense, and of practical experience. His opinion of the importance of the subject is given as follows:

"To the farmer, especially, the author desires to address himself, and would earnestly call his attention to a source of profit, which, if zealously pursued, will assuredly exceed most, if not every other speculation, within his province.

It is often said that farmers cannot obtain sufficiently remunerative prices for the horses which they rear. But the reason is obvious; they do not breed from the right sort, neither do they take sufficient care of their stock."

To the two last assertions, I would call the particular attention of your readers—1st. *Get the right stock*—2d. *Take care of your stock.*

These certainly are cardinal rules, and without their due observance, disappointment is inevitable. In the succeeding pages the author tells us what is the right sort, and what the care they need. Previously to entering upon the main business of the work, however, he discusses further the inducements offered to farmers for engaging in the business. He says:

"The apprehension of railway traveling superceding the use of stage coaches, led to the idea that there would be no market for the immense numbers heretofore required for that purpose, and hence, that a great number of the pleasure horses, or those used by private individuals, would be dispensed with. The expectation that the stage coaches would be run off the road by the united powers of steam and fire, has been fully realized. Nevertheless, when the immense number of horses now used to convey travellers from the railway stations, to the various towns and villages in the vicinity, are considered, it will be found that there are nearly as many kept as during the time of the stage coaches. There are infinitely more persons in private life, who employ horses for pleasure and convenience, than ever there were," &c.

"One of the main points urged by the farmer against breeding horses, is, that he has to wait so long for a return of his capital. That assertion is readily met. In the first place, if he cannot command an adequate capital, he cannot embark in a more injudicious speculation than that of agriculture. In the next, how much longer has he to lie out of his money, by breeding horses than bullocks? The latter are not fit for the butcher till they have attained from three to four years. The cost of rearing a bullock, is nearly equal to that of rearing a horse, till they have respectively arrived at the age of three years. The cost of fattening a bullock, which requires six months or more to accomplish, is greater than is requisite for the keep of a horse during a similar term at any period of his life.

A good bullock, when fat, is worth about twenty-five pounds. An inferior horse at the same age, is worth quite as much money; and a superior shaped hunter, or carriage horse, will fetch three or four times the sum, and higher."

On the next page the author recurs to the cardinal rules laid down in the preface, and utters them with even more emphasis—he says:

"A great number of farmers have abandoned the pursuit of breeding horses, in consequence of what they denominate ill luck; but they have not set about it in the right way. They have made an injudicious selection of mares and stallions, the produce of which have been badly kept. * * * * In the winter, the only asylum for shelter has been the farm-yard, where, in company with cows—the roughest food has been offered them. Few animals so treated, are worth a twenty pound note at four years old. Unless a farmer will determine on keeping them well, he had better never attempt to breed horses, or in fact any other kind of stock."

The author here occupies several pages with his views of the proper mode of keeping or stabling stock. He is decidedly in favor of keeping mares and colts, and also young horses, in small enclosures or paddocks, with hovels enclosed or contiguous, by which they can be perfectly shielded from storms. He prefers the practice of soiling to pasturing. Undoubtedly a greater number may be kept on the same "average" by this system than by pasturing, but our style of farming is not sufficiently thorough to admit of its general adoption in this country. The remarks of the author on the importance of sheltering colts from storms and showers is worthy of careful consideration. I have no doubt much injury is inflicted on our stock by neglect of this matter. If we paid more attention to their protection from the weather, we would not have so many horses with heaves and broken wind. We certainly have many more of them than they have in Great Britain. I must quote our author on this subject:

"Here it is necessary to urge the importance of adopting the utmost caution not to allow them (young foals) to be exposed to wet, not even a shower of rain, on any account whatever. At any future period likewise the utmost attention is necessary to guard young stock from getting wet across the back or loins.

The woolly texture of the coat of a foal is of such a nature, that when once it becomes wet through, it is some time ere it gets dry again. There may be some persons who conceive this to be a species of unnecessary caution, and that under the impression of bringing up their stock more hardy, they should be exposed to the casual vicissitudes of weather. A greater error cannot be committed. I can only remark that a state bordering on disease is not calculated to promote a robust constitution. A catarrhal affection, or cold, let it affect what part it may, is a disorder that should never be thought lightly of; frequently repeated, it becomes constitutional; thus if the head, the glands, and the throat are attacked, they fall into an unhealthy state, and, when the strangles makes its appearance, it in all probability issues in a decided ease of roaring. To rear stock that shall be hardy and robust, every event likely to produce disease, however trifling it may be in itself, should be carefully avoided."

I repeat the opinion, that this is sound advice. If we would make breeding horses profitable, we must take more pains. It is what is called *bad luck* that interferes with the profits of breeding. Many colts die—many get maimed, &c. Now more than one half of them could be brought profitably to market, if we would but take a little more care of them. Accidents and diseases always follow neglect.

Our author next makes some excellent remarks on stabling. He says:

"One of the principal features in the good arrangement of buildings for the purpose of sheltering horses, is ventilation. Most persons are willing to acknowledge the importance of ventilation; and yet many buildings appropriated to the use of horses, are very imperfectly constructed in this respect. It may therefore appear necessary to add a few more words on this important subject, the result of investigation made by an acknowledged authority. Boussingault calculates that the horse consumes thirteen pounds three and a half ounces of oxygen in twenty four hours, which is used in converting the carbon into carbonic acid. Presuming therefore that the same excess of oxygen is consumed by the horse, that is consumed of carbon, according the experiments of Boussingault, a horse requires more than five times the amount of fresh air essential to the vital process in man; and, furthermore, when it is observed that the air in a confined room, becomes contaminated and deprived of its vital properties by the process of inspiration and expiration—how important it must appear that horses should be kept in apartments very perfectly arranged for the admission of fresh and the escape of foul air."

This too is a consideration that has not yet received, in our country, one half the attention it deserves. The author also enjoins it upon all farmers, to keep their stables dry. To have no moisture under the floors, and no walls that will collect moisture, as it is a fruitful source of disease.

In the construction of stalls he recommends side drains, of tiles or other material which shall convey the wet to a tank in the yard, for the use of the farm. The flooring of stalls he thinks should be a pavement of small smooth stones. These he considers better than bricks, because the horse is not so liable to slip on them. He prefers wells or mangers for hay to racks, because they put the head in a more natural position for feeding, and because racks cause more waste of hay by pulling out, &c., and fill the eyes and ears with seeds, &c. Our people think colts should eat from high racks, to teach them to hold their heads high. This I think is rather a whim; if they will not hold up their heads by the excitement of driving, they are not of the right sort, and I doubt whether any kind of early training will raise the head of a lubber, or keep down the head of a flyer.

The necessity of great cleanliness, in all parts of the stable, is enforced by various considerations, such as the prevalence of epidemic diseases in stables where this is disregarded. But I have made this article too long. My next will contain extracts more particularly related to breeding. B. *Syracuse, Jan.* 1852.

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Remarks on a few Varieties of Plums.

EDS. CULTIVATOR—The following remarks on the under named varieties, are in accordance with my own experience, after ten years trial. My soil is light and sandy, but kept in good condition. It may assist those who are are about making a selection for such soil. I have a few others on trial, the result of which I shall give from time to time, after being fully tested. I do not pretend that the results given are uniform in every soil and location, but only applicable to such as I occupy.

Bolmar's Washington.—This variety, although highly extolled, I cannot speak of in terms of commendation. It has fruited with me for six or eight years, and although the fruit sets well, so great is its liability to rot in all seasons, and all weathers, that from heavily loaded trees, I have never been able to obtain more than five or six perfect plums from each tree. I have no hesitation in pronouncing it worthless with me, and this is the character it bears with many persons who have cultivated it in the part of the state where I reside, and of whom I have inquired. Its large size and handsome appearance seems to have given it a popularity far beyond its merits. It may do better elsewhere. I do not think it adapted to Connecticut. [This is the result with this otherwise fine plum, in many other portions of the country. Eds.]

Prince's Imperial Gage.—This I have cultivated for the same period as the Bolmar. It is a plum of excellent flavor and a prodigious bearer, but like the former is rather liable to rot. It is very prolific, and by protection from curculio, it generally yields a profitable crop.

Red Gage.—This variety I cannot speak too highly of. It is of good quality, a regular bearer, and the fruit very hardy against the rot. I have retained this as one of my best plums.

Orleans—may be *Smith's Orleans.*—(The tree and fruit, pretty closely agree with the description of the latter given in books.) This plum I consider valuable for light soils; it is a great and sure bearer, of excellent quality, and tolerably hardy against rot, excepting when hanging too thick, but pretty sure of yielding a profitable return with proper attention given to it. Respectfully yours, J. WATERS. *New Milford, Ct., Dec.* 18, 1851.

The Necessity for a Proper System of Instruction in Agricultural Science.

Analytical Laboratory, Yale College,
New-Haven, Conn., Jan. 31, 1851.

Eds. Cultivator—I do not propose to take up the above subject in its broadest sense, but to confine myself to a comparatively limited field. I shall say little at present as to the want, felt more and more every day by an increasing majority among our farmers, of educational institutions especially adapted their wants, but would call attention to a point which has been overlooked by many in their zealous advocacy of the general cause. It seems to me, that a chief reason for the annual failure of so many plans bearing upon the educational interests of the farmer, may be found in a real scarcity which exists, of men competent to take charge of the proposed institutions. To those who have never reflected upon this subject, my assertion may seem a strong one, when I say that if any six states of the Union were within the present year to make provision for the establishment of state agricultural schools, or colleges, within their respective borders—were to endow them largely in every department, to furnish them with libraries, implements, museums, apparatus, buildings, and lands, they could not find on this continent the proper corps of professors and teachers to fill them. I will even go farther than this, and say that if in your own state of New-York, a large institution were planned out, and all proper departments of instruction pecuniarily provided for, it would be a difficult matter to fill them satisfactorily with thoroughly competent men. Enough of those who would gladly accept such appointments as might be offered, could doubtless be found, but the question is, would they be just such instructors as the farmer requires ?

There are certain points relative to which he demands information from various branches of science, and this information to be of value must be *correct*. Mistakes, blunders, misconceptions, from the heads of a great state school, sent forth under authority, and promulgated rapidly, would cause infinitely greater mischief than our going without a school altogether for some years to come. For such reasons, extreme caution should be used in the selection of instructors for any large or influential school, and for such reasons among many others which might be adduced, I have ventured to say as above, that we really have not in the country the men that are needed.

If the farmers of any state were to select persons to impart instruction, or to serve as examples, in any practical department of their business, would they be contented with mere professions, or mere hearsay reports, of their success or skill? Above all would they not be disposed to question the expertness of one who professed to have made himself familiar with every department of mere mechanical labor, in the lapse of a very short time? If teaching the use of the plow in the best possible manner, and under every circumstance, were for instance the object, would they be content with a man who could only show the experience of one or two years in the use of that implement? By no means; they would say—we can do as well as he can ourselves, and do not need such instruction as this; we want a master of the subject, one who has studied it thoroughly in every department of practice, and has brought an intelligent mind to bear upon all the variations of use and construction in different districts. With a man of less acquirements than these in any practical matter, no community of farmers would be satisfied; they would not receive his advice with respect, and would not consider his opinion as worth much more than that of any other intelligent individual.

I think all will agree with me, that these views are correct with regard to subjects of pure practice, and that most farmers would act in accordance with them. Now I ask, why do not the same views obtain with regard to the teaching of science? We see men who are in all ordinary circumstances, shrewd and sagacious, swallowing every fable that comes to them in a scientific guise.

The merest charlatan may take up his books and mysterious looking apparatus, and having familiarized himself with a few hard names, is able to persuade the mass of those who meet him that he knows everything within, upon, and above the earth, that explains the action of nature's laws. Allow me to say a few words in direct reference to the falsity and even absurdity of such pretensions.

In speaking of the mechanical operations of husbandry, such as plowing, I have said that as a general fact, entire proficiency could not be attained within one or even two seasons; a long course of experience was necessary. Is it then so much easier to read the laws of nature, or rather of God, which bear upon those wonderful structures of plants and animals that we see about us! In the growth of the humblest weed that flourishes by the wayside, a series of changes, transformations, and metamorphoses, goes on, which as yet the highest effort of the human intellect has failed to fully explain and elucidate.

To produce the feeble stem which we crush under our feet in passing, the powers of earth, air and water, have joined with those of the far distant sun, and during its short life, it has been an example of a complication of most wonderful laws, imposed by the Almighty Maker of all. He has seen fit in his wisdom to ordain, that every step in knowledge must be won by toil and exertion, and thus it is in the present case; we are only able to slowly unfold the wonders that are occurring on every side, during the every-day experience of life. The field, too, widens as we advance, until we find that every step has its consequence, every breath of air its appointed mission, every drop of dew its office to perform; we discover that we are in the midst of causes and results, of which our knowledge is quite limited; that the threads we have seized only guide us to new and more difficult labyrinths of investigation. What we know dwindles away, when we compare it with the sum of that which we desire to know.

The true student of natural science, then, the true follower of patient, earnest, truth-seeking research, grows not bolder, but more modest, as he wins his way; he knows that his highest reach of knowledge is, and ever must be, limited; he feels each day so many wants yet unsatisfied, sees so many problems yet partially solved, or totally inexplicable, that he leans constantly towards caution, rather than rashness, and is disposed to qualify his strongest convictions on all theoretical points.

Of those who are not thus impressed by the advance of years, and the increase of experience, it must be said that their opinions cannot be entitled to great confidence. One who can promptly and confidently settle every question proposed, who has no doubts as to his own ability of decision on the most intricate and complicated problems, must be either a man who has advanced very far beyond the range of the other votaries of science in his own day, or one who is not able to appreciate the difficulties which surround him, and who is not, therefore, a safe guide. There is a third supposition in the above case, which is to consider such a man designing and unscrupulous, but this is, let us hope, the rarer alternative.

I might go on at great length, but these hints will, I think, be sufficient to show that farmers must not only have instruction, but that they must have it of the right character. It is obvious that every person who comes along, claiming to be highly scientific, should not be taken upon trust, but should be tested in some way, as to the soundness of his pretensions. Let the evidence of other scientific men be brought in, and let satisfactory proofs be required of his ability to do what he professes. This is not said with a view of recommending any particular person or persons, as to be followed implicitly, but with the desire of arousing more caution than has hitherto been exercised in these matters. "All is not gold that glitters," and all is not true science, that is high sounding.

It is for such reasons that I have said—we have not at present a sufficient number of the proper men to found and continue our agricultural schools, in a manner that will satisfy the expectations of the community. The training of such men, then, is a work of great importance, and even urgency. It is a work that cannot be accomplished at short notice; one or two years will not do it; we want those who have had extensive experience, who have availed themselves of every advantage for the acquirement of reliable knowledge, and who have learned to know what the necessities of the farmer are.

Among the wants of the farmer I consider this lack of first rate instructors, one of the most pressing and urgent; it is useless for him to establish schools, unless he can find proper teachers, and he ought not to be driven, by their premature establishment, into any dependance on those who can only mislead and disappoint him.

Here is a most promising field for enterprise and energy; here are many openings that within a few years must be filled. Those who now enter upon the study of science as applied to agriculture, will find their acquisitions in immediate demand. If but fifty or one hundred intelligent young men, would for the coming few years, devote their efforts to the acquisition of the various branches of science connected with agriculture, they would control the whole field, and be able to sweep away the glaring errors which are now so prevalent. We could then commence with schools in all directions; quackery and ignorance would decrease, and a great and rapid advance would be visible in every quarter.

Let us, then, while we are agitating the subject of instruction, not forget to urge upon our young men of ability, the advantages of fitting themselves as instructors; there cannot be too many of them for years to come, and they, therefore, need not fear that the profession will be overstocked. Yours respectfully, John P. Norton.

Cultivation of Onions.

Editors Cultivator—I observe in the January No. of the Cultivator, an article on the Culture of the Onion in Ohio; and as I have been engaged in the growing of that important vegetable for the last two years, perhaps a statement of my mode and success in raising that article, may be interesting to some of your readers.

I commenced the business without any knowledge of it, except what I obtained from Comstock and Freer's Gardener's Almanac, and the produce the first year was at the rate of 400 bushels per acre. The ground was what is generally called bog-meadow, with a thin soil, underlaid with blue clay, with which it was considerably mixed. It was manured with rotted barn-yard manure, at the rate of 20 loads per acre. The ground was plowed in the fall, and as soon as dry enough in the spring, the manure was spread on, and well harrowed in. The ground was then marked out with a marker with four teeth, placed 14 inches apart, making three drills at a time, (one following in the last mark, to keep the rows straight,) and the seed (Wethersfield large red,) sown at the rate of 4 pounds to the acre. It was sown the 2d of April. It came up finely, and when the spikes were two or three inches high, the hoe was passed through the rows, destroying most of the weeds, leaving only a small strip along the plants to weed out. This was repeated as often as necessary. They received two slight top-dressings of ashes, once in June and once in July. At the second weeding, thinking the plants were too thick, they were thinned out, which no doubt diminished the crop considerably. They were gathered in September, and sold at 56 cents the bushel.

With the knowledge thus gained by experience, I went to work in the fall of 1850, to prepare the ground for the next year, feeling confident that a much larger product might be obtained. After plowing, I drew wash and soil at the rate of 40 or 50 loads per acre, scattering it as evenly as possible, and let it lay till spring. The first day of April the seed was sown, at the rate of 8 pounds to the acre. They grew most luxuriantly, some of the tops measuring three feet in height, and bottoms 15 inches in circumference. Part of the piece proved too wet in the fore part of the season; but nine square rods of the dryest part of the patch yielded 64 bushels, or 1,138 bushels per acre, netting at 62½ cents, (the price clear of freight,) $711.25 cents the acre. Besides yielding so largely, they are highly esteemed by all who have used them, being much sweeter than those raised on the upland. A sample was on exhibition at the Fair of the American Institute, and received the first premium as the best red onion.

Now, Messrs. Editors, without wishing to detract in any manner from the reputation of the fertility of Ohio, I must say that Old Orange can produce some pretty "tall" onions, as well as milk and butter. A Subscriber.
Chester, Orange Co., N. Y., Jan. 19, 1852.

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The Turnep-fly.—In some parts of England this insect has been so destructive as to threaten seriously the continuance of the turnep culture. By the use of guano and bone manure, an inherent vigor has been given to it, enabling it to resist effectually the attacks of the fly.

The Pear on Quince.

We are receiving continued inquiries as to the best kind of quince for dwarf pears, and of the propriety in any case of going largely into the cultivation of dwarfs.

The best quince for this purpose is the sort imported from France, and commonly known as the Angers quince, a sub-variety of the Orange quince, more vigorous in growth than that, and continuing longer in growth in autumn. There are a few varieties of the pear, however, which seem to be so naturally adapted to the quince, as to flourish almost if not quite as well on any sort. Among these are Louise Bonne of Jersey, Dutchess Angouleme, &c., but with most other sorts suitable for dwarfs, it is much better to procure the French stock.

But there is a very small proportion of good pears that should ever be propagated on the quince. Some will not grow at all upon it; and of those that will, most are short-lived. They flourish finely for a few years, but as soon as they come into full bearing, they become feeble, and often the first good crop seems to exhaust nature, and they soon perish. It is rare that double-working obviates the difficulty. Much disappointment must result from the indiscriminate dissemination of the many sorts which grow freely and flourish for two or three years on quince stock, and then linger and perish. There is no doubt that a difference in the composition of soils, and in the treatment the trees receive, have an important influence on their duration, but none should be propagated and planted, except for experiment, which are not known to succeed under good culture in all localities. More experience is needed to determine a full list for this purpose; among those which so far appear to have done best, are Dutchess Angouleme, Louise Bonne of Jersey, Diel, Passe Colmar, Glout Morceau, Doyenne Boussock, Winkfield, Summer Frankreal, Stevens' Genesee, &c. No fear need be entertained in planting these on a large scale, even to be trained with heads at standard height for field culture, provided the soil receives clean and enriching cultivation.

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Tobacco for Trees and Plants.

Eds. Cultivator—Could you inform me, through your paper, the effect of tobacco (the ribs or stems and refuse) upon peach, plum, pear and apple trees, and the mode of application. B. H. Detweiler. *Trappe, Md.*

Tobacco, for destroying insects, is applied in two ways. The most common is to form a strong decoction. It may be prepared by pouring over the tobacco in a tub or barrel, enough hot water to cover it, and let it stand some days. If strong enough, it will destroy plant lice, and other small insects which infest fruit trees. It often fails for want of sufficient strength. A mixture of a small quantity of starch in solution, will add to its efficacy without increasing in any degree the danger to the trees. A mixture with it of a solution of soap also adds to its effect, but if the soap be strong, it proves in some cases injurious to the young foliage. Tobacco, being a vegetable poison, will not do any injury, however strong it may be. Small trees may be bent over and dipped into the solution; it may be applied to larger trees by a showering syringe. Smoke from burning tobacco may be applied to plants by means of *Brown's Fumigator*, a small instrument made of tin, costing from three to five dollars, and kept for sale by R. Buist of Philadelphia, and by Hovey & Co., Boston.

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Mowing Machines.

Eds. Cultivator—I wish to inquire if there is any mowing machine that you think would work on our meadows here, that would do its work well, and not be likely to get out of repair, and that would be profitable for us to buy. I saw in the Tribune last fall, a notice of "Ketchum's," manufactured by Howard & Co., of Buffalo, N. Y., that was rather complimentary. Perhaps there is some other, better. A. H. Hayward. *Addison, Vermont, Jan.* 1852.

Ketchum's Mowing Machine, is probably the best for the purpose that has yet been made and used. It will work well on smooth meadows, whether level or rolling, and even on smooth hill-hides, but not on rough ground. It is drawn by two horses, and will cut about ten acres a day, which is about the usual rate between the labor of men and horses, the latter doing about five times as much as the former. The cost, with one set of knives, is $100; with two sets, which no farmer should be without, who abhors the delay of sharpening in the middle of his operations, the cost is $110.

Hussey's Reaping Machine, we are informed, forms a good mowing machine.

J. Rapalje & Co., of Rochester, N. Y., are about to commence the manufacture of a mowing and reaping machine, which from some trial, they are led confidently to believe, possesses important points of superiority over any other invention of the kind.

Since the above was written, we have received the following:

In reply to a correspondent at Newport, R. I., I can say that Ketchum's mowing machine, manufactured by Howard & Co., Buffalo, N. Y., has been used in this town with entire success. I have used one of them upon my farm for two seasons, cutting one acre per hour, with one span of horses, and as evenly as it could be done with a common scythe. The machines have been improved the present winter, and are now perfect, and just the thing for cutting grass. Any other information as to the working of the machine cheerfully given. Morgan Butler. *New-Hartford, Oneida co., Feb.* 9, 1852.

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The Best Apples.

A winter exhibition of fruits was held at Rochester, and several very fine collections of apples, and a few fine and rare winter pears, were presented. When the exhibition was about to close, and while some twenty of the most successful and intelligent cultivators yet remained in the room, it was proposed to call a vote for *best winter* TABLE *apple*, (not for marketing) its agreeable qualities being the chief consideration. The vote was entirely informal, and the following was the result. The large voice for the Melon was probably owing to the fact that some fine specimens, then in perfection, had just been distributed.

Melon, 5 votes, for winter fruit.
Swaar, 3 do do
Red Canada, 2 do
Baldwin, 2 do do
Northern Spy, 3 votes for long keeping.

ANSWERS TO INQUIRIES

Tile for Draining.—"What is the most approved form of making tiles for drains, so as to combine cheapness and durability?" R. J. C. *Wayne co., N. Y.*

For ordinary ditches, or when the quantity of water to be drawn off is never large, small tubular tile, from one to two inches in diameter is best. If the ends are so made that one will fit within the other, they will keep their places well; but if no provision of this kind has been made, the ends may be placed in close contact, with a small flat stone underneath, to prevent one end from settling lower than the other after the earth is filled in.

Main drains, or those carrying much water at the wet season, have been formerly made by a semi-cylindrical tile placed on a shoe or flat plate of tile; but a later improvement consists in forming a round tube by placing two semi-cylindrical tiles together, matching together at their edges, the upper halves being so laid as to break joints with the lower, and which prevents their settling away from each other. A tube thus made, five or six inches in diameter, will carry off a large quantity of water. Some have been made in England as large as nine inches.

Cranberries on Upland.—"Can you inform me if cranberries have ever been cultivated on upland, so as to yield good crops?" F. W.

We have heard or read of instances where this fruit has been so grown; but they are so few, that we have been led to suppose that the statements of success have been greatly exaggerated, or else that it has been on upland possessing some very rare qualities. At all events, although many years have elapsed since this mode of culture was first announced, we cannot hear of the first distinct well authenticated experiment, giving weight and measurement, for a succession of years. Why should we be without such experiments, with the present high prices of cranberries, unless there is some insuperable difficulty?

The Prairie Farmer says that the swamp only is the home of the cranberry—that it will not even flourish on low or wet lands which are filled with water in spring, and dry up in summer—that the lands must be either *springy* or be such as are continually fed from springs elsewhere. The reader will find a few remarks on this subject on p. 35, current volume, of this journal.

Flax Culture.—W. H., Philadelphia. You will find the information you want on the culture of flax, in our vol. for 1850, pp. 129 and 308. For a notice of the new mode of preparing flax for use, see Cultivator for 1851, pp. 89 and 341.

Ayrshire Cattle.—A. D. H., Addison, Vt. The animals you inquire for, yearling Ayrshire bulls, can be procured of E. P. Prentice, Esq., of this city, who has one of the best herds of this breed of cattle, in the country.

Gilmore's Apiary.—H. T., Vernon, Ct. The information you desire in relation to this apiary, may be procured, we presume, by addressing Messrs. Edwards & Platt, Brooklyn, N. Y., who are now the owners of a large apiary put into operation by Mr. Gilmore, previous to his death, a year or two since. So far as we know, the plan, both of keeping and feeding the bees, has been approved by all who have adopted it.

Double-working Pear Trees.—N. Hart, Lysander, N. Y. Double-working is adopted for such varieties of the pear as will not grow by ordinary working on the quince. It consists merely in first budding on a quince stock, some variety which takes and grows freely, and then budding into this pear top, the sort which cannot be grown by immediate contact with this stock. It usually happens, however, that such "refractory" sorts, even when double-worked, are not of long duration as bearing trees.

Distance for Standard Pears.—J. A. Donaldson, Ravenna, O. From fifteen to twenty feet is a good distance for most varieties, as the Virgalieu or Doyenne and others. Where there is plenty of ground, twenty feet would perhaps be best.

Gooseberries.—N. R. The English varieties, although sometimes cultivated with great success, are always more or less liable to injury by mildew. The best sort for all kinds of treatment and all localities, is *Houghton's Seedling*, a very hardy, free growing, and profusely productive sort, and a native of this country. The berries are medium in size, fine, tender and thin-skinned, and they never mildew.

Treatment of Seedling Apple Trees.—J. A. Donaldson. If they stand in rows so as to remain for a few years, the trees for which they are to furnish the base, will come forward more rapidly by budding them next summer. But if removal is necessary, grafting in the root will be best for all those which may be large enough, that is as large or larger than the inserted grafts.

Sap Boiling.—The pans which I use in my sugar boiling apparatus, (see Cultivator vol. for 1847, p. 24,) are made of a single sheet of Russia iron, and are four feet long, 21 inches wide, and about five inches deep. They are supported around the top by a three-eights inch wire. I find the advantage of the cauldrons to be, that it takes no more fuel to boil the sap in the cauldrons than it would to heat the pans sufficiently, the fire passing from the pans under the cauldrons and then completely around them to the chimney. I made use of an old gun barrel for tubes from the cauldrons to the pans. I had holes drilled in the cauldrons about five inches from the top, and headed the tubes in. I make use of stop-cocks in the tubes from reservoir to cauldrons, and from cauldrons to pans, to gauge the size of the stream, so as to keep a stream constantly running. Any one putting up such an apparatus, will find it to their advantage to make use of perfectly dry wood, and of some soft kind, and also to have some shelter, or building over the works. Lyman Hall. *Shelburne, Vt., Jan.* 22, 1852.

Rat Proof Granary.—A granary matched and battened on the joints, and tin nailed round the door, window, and door and window frames, will usually secure the desired end. A bin lined with tin or zinc, will prevent any entrance at the sides.

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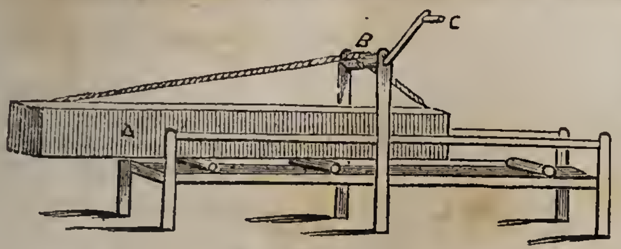
Laws for Agriculture.—It has been remarked, that farmers never make laws for their own interests, but always for other people's—and then take care of themselves as well as they can.



The Mangle.

We promised last month to furnish a figure and description of the mangle, or machine for smoothing clothes. We regret that we have been able to fulfil this promise so far only as relates to the old fashioned or cheaply constructed mangle, having been unable to exhibit the modern improvement, which is at present but little introduced and known. The machine here described may be easily made by any carpenter, and the whole cost would not probably exceed ten dollars. The new kind, which makes more perfect and expeditious work, costs, we are informed, from twenty-five to fifty dollars. Its use appears at present to be chiefly confined to England. It is remarkable that ingenious Yankees should have given so little attention to the improvement and manufacture of a machine, as important and useful as a churn or a stove, while the latter are patented by hundreds and made by myriads.

The figure represents a table or bench of frame-work, seven or eight feet long, and about two and a half feet wide; it has a railing at the sides, but is open at the ends to admit the motion backwards and forwards of the large box A, which runs on *movable* rollers, and which is filled with stones so as to have great weight. A rope attached to each end of the box passes round the roller B, so that by turning in alternate directions the winch C, the box is thrown backwards and forwards upon the rollers. Table-cloths, sheets, pillow cases, and all smooth articles, or those which have not many gathers, are best adapted to the action of this machine. They are first folded so as not to equal in breadth, the length of the rollers, and are then wrapped snugly round the latter, and again outside of these a coarse linen cloth is bound, when the whole is ready for work. The rollers are placed on the vacant end of the bench, and the box then trundled upon them; its great weight presses them nearly as smooth as by any ironining. Those which need ultimately the smoothing-iron, are finely fitted for it, and the work much lessened, by first passing them through the mangle. A boy to work the winch, and a woman attending at each end, will finish a dozen garments in two minutes. The improved machine, which is turned continually in one direction, will perform more rapidly. The rollers in the common mangle are of hard wood, and are three or four inches in diameter, and a little longer than the width of the bench, so that their projecting ends prevent them from falling off, when by their progressive motion they reach the end of the machine.

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Queries for Correspondents.

Plans of Barns.—Wishing to erect barns and sheds to accommodate a large farm, principally in grass, I would inquire, through the Cultivator, for the best plan, say for the storage of 150 tons of hay, a small quantity of grain, and stabling for 100 head of cattle of the different ages.

I want a plan that will combine in the greatest degree economy in construction, and convenience and saving of labor in storing of hay and feeding the same. Can all this be best secured in one large barn or a number o smaller ones? Will you or some of your correspondents reply to this. I would say that the ground is nearly level on which it is proposed to build. V. A. *St. Albans, Jan.* 16, 1852.

Cattle.—Some of us think the Durham cattle fail as to toughness—that is, are rather tender, and the milk not very rich. If so, would not a cross from the Ayrshire do well? I have seen a good cross of the Durham and Devon. Would not the Durham and Ayrshire be better, and be more like the descendants of the stock introduced by Gen. Barnum, a good many years ago, which, all things considered, were equal at least to the improved breeds as we have them here. A. D. H. *Addison, Vt., Jan.*, 1852.

Mice and Bees.—Will mice kill honey bees? G. M. *Lowell, Mass.*

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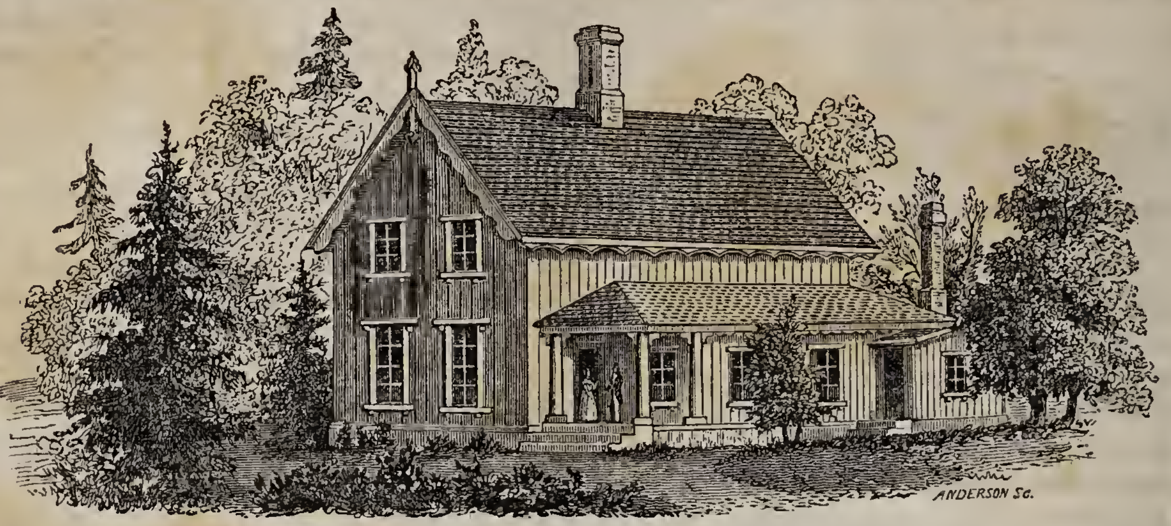
Importance of Farming Well.

Skilful farmers are aware that the business cannot be profitably conducted without capital enough to do everything in the best manner. The farmer who has not enough funds on hand to enable him to do this, must therefore submit to the alternative of either being in debt, which ought always to be unpleasant, or else reducing the quantity of his land that he may obtain the means. For we have plenty of instances where two hundred acres badly farmed have not yielded so much clear profit as fifty acres under the best culture.

We have received a statement from Seymour Smith, of Clermont, of his success in farming, illustrating these marks, from which we copy the following:

"I have taken agricultural papers for more than forty years, beginning with Mr. Skinner's at Baltimore—they have been of great and beneficial use to me. I purchased a farm on the river in Columbia county, then considered almost a barren heath. I examined the premises and arranged the lots—and then commenced business by making permanent fences of stone, posts, and boards. All necessary buildings were erected—and particular attention given to the cultivation of fruit—not forgetting *Flora*. Hollow draining was adopted on every part of the farm needing it; and now, where bogs existed and flags used to grow, corn, wheat and barley are produced in abundance. Hollow draining, as well as sowing plaster, was a new thing in those days—and my neighbors, who sowed grass seed (as well as plaster) with thumb and finger from a quart measure, predicted my failure. I gave very particular attention in the selection of stock, and have improved my animals by crossing certain kinds. And what has been the result of this improved system, which I have derived mainly from agricultural reading? Of the farm that I thus improved, I have sold 103 acres for 90 dollars an acre, and can sell 40 acres on the river for 200 dollars per acre. In the commencement of my farming I had but little means, scarcely sufficient to stock the farm, which I run in debt for; and the question arose, "Shall I go on as the farm now is, and endeavor first to pay for it; or shall I improve it according to my means, and then pay for it? The latter course was concluded on. In ten years, by fencing, draining, building, and the cultivation of the choicest kinds of fruit, the farm had at least doubled its value; therefore in one way of reckoning it must be said that it had paid for itself, but not a dollar had yet been paid except the annual interest. Thus situated, I commenced the liquidation of the debt, and the farm was so productive that in a few years all incumbrances were paid—which verifies the assertion that an improved system of management, according to the best practical and scientific rules, as set forth in agricultural works, is the surest guide to success."


ANDERSON Sc.

Description of a Country Dwelling.

THE following plan and description were furnished us by a correspondent, from whose sketch of an elevation we have procured the above perspective view. This plan is in the main, we think, an unusually good one, and furnishes a large number of conveniences combined together. We cannot but think however, that either greater height, than our correspondent indicates, must be given to the main building, or else less to the wing, in order to prevent the latter from being made too flat to carry off water freely, and also to allow space enough between the upper part of this roof and the eaves above, to avoid a heavy appearance—an evil of almost universal occurrence in building wings. We think, too, that a different disposition of the front windows of the parlor might be adopted, so as to avoid the unpleasant and singular defect of a half window in the extreme interior corner. For instance, the parlor might receive the full benefit of both windows, and the small apartment at the end of the hall lighted from the " stoop." We dislike an awkward exterior, it is true; and still more do we dislike an awkward interior. But we must not find fault —we only intended suggestions for a little improvement. EDS.

EDS. CULTIVATOR.—I have been much interested, from time to time, in looking over the numerous plans of buildings which have appeared in the Cultivator, and I cannot but think that any farmer or other person, contemplating the erection of buildings, may, by carefully examining these plans, derive hints from them, if not obtain entire plans, worth more, and which will save them more while building, if adopted, than the entire cost of your paper from its first publication, many times over.

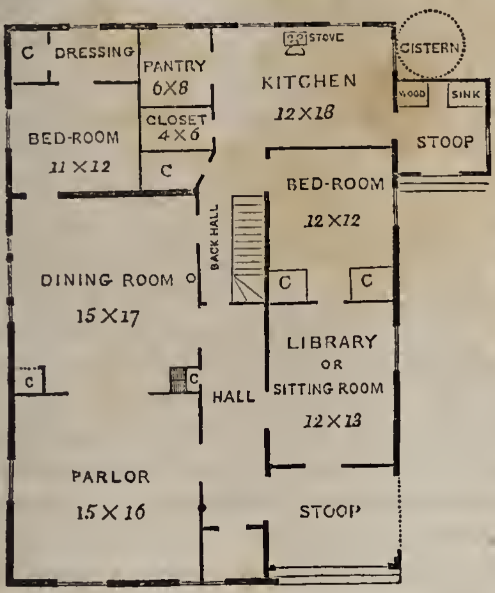
It is a matter of surprise to me, that in a climate as cold as ours, so little attention is given in building, to render houses warm and comfortable. A little attention and expense, during the construction of a building, would add much in these particulars. The use of unburnt brick, or the warm covering recommended in the enclosed plan, with the double coat of plastering around the outer portion, or exposed part of the building, would do much towards accomplishing this. Another thing material is to avoid opening doors immediately into the rooms, from outside. Where a stoop or hall intervenes between the open air and the rooms of a house, they are rendered much warmer. With all these precautions, air enough for ventilation will generally enter through the windows.

Not only should a house be constructed with reference to its being warm and comfortable, but the arrangement of the rooms should be such as to make them convenient for all purposes of house-keeping; at the same time they should be well lighted, to render them cheerful and pleasant. Where the windows are much exposed to the sun, they should be protected by blinds, or verandahs if preferred. As a general rule, however, these last are objectionable on account of light.

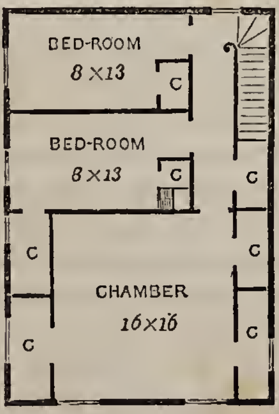
In the country where there is plenty of room for building, a house should never be built without an upper kitchen,—the room of all others in a house, that should be the most used. In cities where ground is costly and lots small, and where there is no unexposed place for exercise, it may, perhaps, be necessary, to save expense and to afford needful exercise to the inmates of the house, by running up and down stairs, to build basement kitchens, but in the country no such reasons exist. The pure open air is the place of all others, to which a person would desire to resort for exercise. The kitchen should be easy of access from all parts of the house, without having to pass from one room to another, in order to reach it, while it should, if possible, be in a measure disconnected with the principal rooms of the house. The necessary appendages of the kitchen—as the pantry, closet for kitchen utensils, cistern, sink, &c., should be conviently located.

Since writing the above, I have had the curiosity to hastily run over the plans in the two last volumes of the Cultivator, and I find some one or more of the objections which I have mentioned existing in almost every plan; indeed, in some of them I imagine I see such faults, that I am almost tempted to take them up separately, and point out what seems to me to be objectionable in each of them; but when I remember the old adage, " never find fault with a man's house or his wife," I think it will be acting the wiser part to let each one find out what is objectionable for himself, as all are at liberty to do with the one enclosed.

Explanation of plan.—The plan enclosed, is intended to be a story and one half in height, with a lean-to upon one side and end. It is 24 by 36 feet, with 16 feet posts. The lean-to part is 13 feet wide upon the side, and 16 feet wide at the end, with 10 feet posts. In the principal story, are two parlors, or a front parlor and dining room, 15 feet by 17 feet, and 10 feet high, connected by sliding doors—a bedroom, 11 by 12 feet, off from the dining room, with a dressing room 5 by 8 feet, and closet. A front and back hall, with stairs in back hall for access to chambers, and underneath to cellar, answering as private stairs, or for all purposes for a family, being much more economical than open stairs, and which are so placed as to accomodate all parts of the house. From this hall is a door opening into a closet at the end of the hall, and also a door (with sash to light back hall,) opening into the kitchen. Connected with the kitchen, is a pantry 6 by 9 feet—a closet for kettles, &c., 6 by 4 feet, and an entry 7 by 8 feet, in which is a sink, with a pump to raise water from the cistern underneath. The sink should have a good drain, to carry off the the waste water. On the right, in the front hall, a door enters a sitting room or library, 12 by 13 feet, from which a door enters a bedroom 12 by 12 feet, with two closets opening into it. A door may lead from the bedroom into the back hall, or kitchen, if desired. All the rooms in the lean-to part, are designed to be 9 feet in height. Up stairs are two bed rooms, 8 by 13 feet each, and a chamber 16 by 16 feet, and 9 feet in height, with any reasonable number of closets.



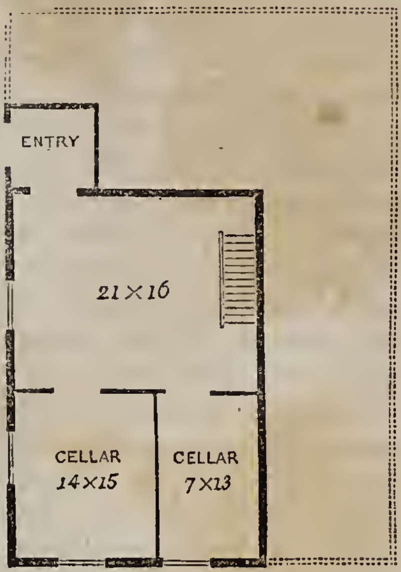
PRINCIPAL FLOOR.



CHAMBERS.

The cellar is under the main part of the building, which gives as much cellar room as is usually wanted—if more is desired, it can be had by excavating under the lean-to part.

The chimneys are ornamental, which, with the verge boards under the eaves, gives a finish to the building in good keeping with the idea of a cottage or country house. The outside finish is of inch boards matched, and put on vertically, with battens four inches in width, and not less than one inch thick, rough or planed, painted and sanded, with a coat of paint over the sand. This makes a handsome finish, far superior to clap-boards, and looks much better. In framing, use timber five by ten inches for posts and girth beams, and for the principal floor, timber eight inches square; instead of framing in scantling as in houses covered with clapboards, frame scantling three and four inches every three feet upward from the sill, horizontally—the four inch side next the outside covering. On these, nail boards vertically inside, to lath and plaster upon; then furr out with inch boards over the plaster and put on another coat of lath and plaster—making a double coat of plastering all around the outside, or exposed part of the building. This makes a house much warmer, and the extra expense is soon saved in fuel. The timbers, each side of the windows, are six by five inches. By using such timber, the projections in the corners of the room as in case of square timber being used, is avoided; and is sufficiently strong. By nailing cleats to the joists, and cutting in short pieces of boards between them, and putting upon this, one or one and a half inches of mortar, before laying the floors in the principal story, it will tend to keep out the dampness from the cellar and add to the warmth of the house. J. *Clinton, N. Y.*



GROUND PLAN.

How Science affects Agriculture.

A lecture on this subject by CHAS. DAUBENY, M. D., F. R. S., has been published in the North British Agriculturist, which shows clearly that the often repeated assertion, that scientific investigation can accomplish nothing for the industrial classes, is without foundation, and originates in entire ignorance of the facts in the case. New discoveries become so soon public property and appropriated to private interest, that the community lose sight of their origin and forget to whom they are indebted for the improvements, which all are so ready to avail themselves of. More careful observation will show that science, by referring facts to general principles, affords the only safe-guard against imposition, and also the only reliable guide to inquiry for truth. The lecturer instances several discoveries of great practical benefit to the agricultural world, which have owed their rise to science.

The dairy lands in Cheshire, England, were observed to become exhausted, the grass did not thrive, and cows fed upon it, could not derive the constituents of their milk. A lucky accident (in no way attributable to science) disclosed the fact that the application of bones restored fertility to the soil, but scientific men were not slow in accounting for this fertilizing property of bones, and in suggesting great advantages to be derived from it. If the phosphates, which the plants in the process of growth draw from the soil, could by external application be restored, the soil would retain its native productiveness. This led to farther investigation and the discovery of very valuable deposits, in which the phosphate of lime was a large component. Aside from the worth of the manure, the landed property, in the districts where it is found, has advanced in value, and employment been given to hundreds of laborers.

With regard to the use of marl as a fertilizer, it might be shown that it was only after it had been analysed and its real nature discovered, that it was employed to any considerable extent. The same is true in respect to guano, and the whole catalogue of artificial manures. It would be difficult to point to any great improvement in the art of cultivation, that has not owed something either in its discovery or perfection to science. Practice is impotent without principle, and theories are useless without practice—they mutually support and aid each other.

Yet it would be an error to suppose that every farmer must become a chemist, in order to be a scientific culturist. It is the privilege of the industrial classes to employ, for their own purposes, the results of science, but they should do so acknowledging their benefit. What chemistry has done for agriculture, are but the pebbles upon the sea-shore of what it is destined to accomplish. But its results will be of no essential service to the farmer, unless they are brought before the public, their worth tested by actual experiment, and the conviction of their necessity forced upon every mind. In this, as in everything else, the force of example is powerful, more so than pages of carefully written and profound argument.

Let a single farmer in a town, commence a system of improved husbandry, and more or less will imitate him. He may be ridiculed for a while, but when it is discovered that he is "making the most money," as well as excelling in other respects, he will be sure of some disciples. Observe how contagious neatness is in a village; cottage succeeds to cottage, flower garden to flower garden, and lawn to lawn, and it is equally true that dilapidated houses, broken fences and weed-ridden gardens are found side by side. So on a larger scale, will it be with farms. One well tilled, productive, improving farm will extend itself beyond its boundary lines, as certainly as an honest, intelligent, thoughtful man will exert an influence. The great body of farmers can never be thoroughly read and learned man, but they can use the details of other's experience in their own practice—they can carry out the principles, which the study of scientific minds has established.

In the mechanic arts science has always been the parent of improvement, and if the manufacturer would be successful, he must combine all the recent discoveries in his practice—must make his capital yield the greatest possible income. Agriculture is a no less dignified and important art—it requires no less ability and research than manufactures. We trust the time is not far distant, when a short-sighted ignorance will give place to more enlightened views, when the sons of the soil will invoke the aid of science as their patron divinity, and labor be invested with new power.

SIZE OF ENGLISH CART HORSES.—The editor of the Michigan Farmer, says that the heaviest horse he saw at the great Windsor cattle show, weighed twenty-three hundred and fifty. His owner said that many exceeded that weight, and mentioned one that weighed twenty-seven hundred and fifty.

Attacks of Insects on Vegetation.

The following communication, relative to the attacks of insects on vegetation, contains some good suggestions, well worthy the attention of entomologists. But the writer appears to have committed the same fault that he complains of in others, and in Gardner's Dictionary. He furnishes us with what he considers *probability*, and which, until thoroughly proved by repeated observations, we cannot but regard as *conjecture*. All we claim is, that none shall assume the position of *teachers*, when they ought to maintain that of *investigators*. If the positions of our correspondent are correct, all we desire is clear, repeated, and undeniable proof, never mistaking cause for effect, and *vice versa*—not merely in one, but in all localities—not only in one, but in many seasons; for there are numberless ways of being deceived, and single observations, and circumstantial evidence, will hardly satisfy scientific observers who cannot adopt an opinion as truth, until it is established completely by what LORD BACON termed the "*experimentum crucis*," or cross-examination of nature. EDS.

About the beginning of December, (the 11th,) an article appeared in the Christian Intelligencer, credited to the Albany Cultivator. It is headed "*Rot in Potatoes—Yellows in Peach Trees—Disease in Buttonwood Trees*;" and the object is to attack certain *opinions* advanced by Mr. BUCKMINSTER, Editor of the Massachusetts Plowman.

My own object is to furnish a hint, how aside from the purpose some investigations seem to be conducted; and also to show by a single palpable example, how a fact, that ought to have been fully proven, and set down as established in the Natural History of Horticulture, is still bandied about, affirmed and denied again for successive years, as if it were not susceptible of the simplest sort of proof, and that absolute.

An opinion may lead to the most important fact. It was in consequence of the opinion formed before hand, that KEPLER was led to discover those immortal laws of the heavenly bodies that bear his name. On the other hand, a turkey may have denuded a cabbage plant of its leaves; but all parts of the plant may be examined by the most powerful magnifiers in existence, without finding any such creature. The turkey may be flown, or dead, or roasted; yet it was the turkey that did the mischief, nevertheless.

I wish to bring forward that condition of the peach tree called, or which ought to be called, *the Curl*; that is, when the leaves present that peculiar twisted appearance, with a blistered form or forms on the upper surface, and a corresponding dimpled one on the under surface.

Whoever has seen a cabbage plant, or still better, a currant bush, infested with the well known little insect called the aphis, in systematic language, would immediately have the *probable* cause of the curl suggested to him. There are the same swellings on the surface of the leaf, while the insects will be found congregated in large numbers in the dimples under it. I do not see how any one could escape the suggestion.

Now there is one thing to be noticed; that the deformity of the leaves is not caused by the insects there present, for it is well known that on most plants they prefer almost exclusively, the small, young foliage, in juicy tender state, just developed from the bud. It is at this time, that the texture of the leaf is injured, which afterwards shows itself in the deformity. On the grape-vine you will find the young tendrils as well as the leaf buds, and these parts alone are covered by the aphides. But the blistered leaves are rare, and not conspicuous on the grape.

When we apply these hints to the peach tree, and search for the aphis, after the tree attracts our attention by being covered with curled and blistered leaves—quite green, not yet yellow ones—we shall be disappointed. We may not even find his cast skin. But if we had examined earlier in the season, in a chilly, wet spring, or even when snow may lie on the earliest half-grown leaves, we would have discovered him readily enough.

This may explain why some who have observed but casually and insufficiently, suspect that this curl of the leaf is caused by frost and chilly weather. The truth is, that the aphides generally bear a considerable degree of cold; and that they remain but a short time on the peach tree, and only at that early season. They may be found on the common red cherry tree occasionally, in the same way, but in smaller numbers, so as to affect but few leaves. These are facts readily established. Why have they not been established long ago?

What is the yellows of the peach tree? If we consult Gardner's Farming Dictionary, we may conclude that it is merely the dying condition of the tree, from whatever cause, in which he includes the depredation of the aphis or tree louse. But from this slovenly account and inaccurate definition, we might suppose that the investigation of the cause of the form of disease to which the term is proper, had not been commenced yet. A good account of the indications and progress of it is to be found somewhere, and would be far more appropriate than many things to be found in that book.

Again, as to the leafless condition of the buttonwood tree; if one walks in the woods at the time when the oak leaves are expanding, he may find under the trees, the ground thinly strewn with the young, pinkish, wooly oak leaves. This is the work of a brown beetle, which some one has said to be the ashy-green cut-worm in its perfect state, though Gardner tells us, under the head of "Cut-worm," that the latter is developed into a pink or brown moth. This is worth settling. However, what Gardner quotes, Swainson or Loudon, under the head of "Isects," about the cock chaffer, whose larvæ is the common white grub, with a red or orange head—might be applied to it with little alteration. They do not always scatter the young leaves as they do of the white oak.

I have seen whole branches of a young elm at the top, entirely denuded until late in the season, by this depredator. How shall we detect him so as to prove it upon him? Not by shaking the tree at noon, when he is asleep, as is recommended for the cock chaffer; nor would the most powerful glasses applied to all parts of this young elm, find him out. It was necessary to shake the tree *after dark*, and these beetles were heard dropping on the ground in great numbers. But they had to be sought with a lantern, and nimbly seized before they took wing. This sprinkling of oak leaves is to be found as far as Georgia, and so too, are buttonwood trees dying young. Has any one shaken the branches of the buttonwood at night, in the proper season, to discover the cause of the disease?

For the diseases of vegetation generally, particularly where they are prevalent, the insect world presents the most hopeful source of knowledge. Even for the potato rot, there is still some hope from this quarter, although the most powerful magnifiers may be unsuccessfully applied. There are insects that perforate the leaf, and there are others that burrow in the stalk, where the rot appears; it may be none of these; yet there are a variety of modes of investigation, not yet philosophically pursued, nor accurately determined. What we want is first, that what may be readily proven, should be fixed and established. H. R. L. *Rahway, N. J.*

Winter the Time to Think.

Winter is the time for farmers to *think*—spring, summer, and fall, to work; and the three latter season's labor will be to little profit, if the time of the first shall have been misspent. All the plans of next season's operations should be laid and well considered during winter. All improvements, all designs for new operation; all the work to be done, should then be considered and prepared for; so that, when the time for work arrives he will have nothing to do but to "go ahead." Then he has no time to think; but if he has been wise during winter he will have no need of it. It is a pitiful sight to look at in the spring, when all nature is in an ecstacy of delight, to see a farmer flying about "like a hen with her head cut off," trying to do a thousand things at once, not knowing which to do first, running here and there in search of his rusty implements, some of which require repairs, some can't be found; the plowing season passing away, the planting season rapidly advancing, and he not prepared for anything. Oh! it is pitiful. Q.

Culture of Potatoes.

Having noticed many suggestions in the Cultivator, in relation to the potato rot,—I send you my experience the past season, in cultivating the potatoe. My soil of a light sandy loom—plowed pretty deep—thoroughly limed, planted first and second week in May, in hills 3½ feet apart. One acre of "blues" and whites, with manure on the potato in each hill, before covering. One third rotted and one third did not come to half size; began to wilt in tops in July, died in August, taken up in September.

One acre planted with long reds, commonly known in this country as the "long Johns," planted same as above —no manure—grew fine till cut down with October frost —fine, large, and little or no rot.

The first acre worked with the plow and hoe, till July, yielded but fifty bushels. The second acre, worked with the hoe alone till July, and raised in middle of of October, yielded two hundred and thirty five bushels.

Wherein have I failed, and what will be an effectual remedy? Yours truly, G. W. Youngman. *Williamsport, Lycoming county, Pa.*

Ayrshire Cattle.

Eds. Cultivator—This breed, which takes its name from the county of Ayr in Scotland, where it originated, has become widely disseminated; and, if I may credit accounts and authorities, is now, as a dairy breed, the most popular in Britain.

The most authentic accounts represent it to have been formed by the union of the Alderney and Teeswater or Short-horn, with the ancient stock of the district. This is strongly corrobated by the general appearance of the animals themselves; not less by their properties—docility, hardiness, and fecundity in, and richness of, milk.

The nucleus of the breed appears to have been first known under the name of the "Dunlop Stock," having been possessed by a distinguished family in Ayrshire, by the name of Dunlop, as early as 1780.

Rawlin, as quoted by Youatt, who wrote in 1794, speaking of the cattle of Ayrshire, says—"They have another breed called the Dunlop cows, which are allowed to be the best race for yielding milk in Great Britain or Ireland, not only for large quantities, but also for richness of quality."

Professor Low says, in his Illustrations, in reference to the history of the Ayrshires—"Authentic records are wanting to show by what progressive steps this breed has become molded into its present form; but that it had spread over a large tract of the country, and had acquired the character of a distinct and well defined breed."

Col. Le Couteur, in his paper on Jersey or Alderney cows, published in the Transactions of the New-York State Ag. Society in 1850, refers to a statement by Quayle, in which he says—"The Ayrshire is a cross between the Short-horn and Alderney."

Prof. Low sums up the subject as follows: "From all the evidence, which, in the absence of authentic documents, the case admits of, it is clear, the dairy breed of Ayrshire owes the character which distinguishes it from the older race, to a mixture of the blood of the races of the continent and the dairy breed of Alderney."

As to the leading points and characteristics of the Ayrshires, no description is more correct than that of Prof. Low. It is as follows:

"The modern Aryshires stand in the fifth or sixth class of British breeds, as it respects size. The horns are small, and curve inward at the extremities, after the manner of the Alderneys. The shoulders are light, and the loins broad and deep—a conformation almost always accompanying the property of yielding abundant milk. The skin is moderately soft to the touch, and of an orange yellow tinge about the eyes and udder. The prevailing color is a reddish brown, mixed with more or less white. The muzzle is usually dark, though it is often flesh color. The limbs are slender, the neck small, and the head free from coarseness.

"The cows are very docile and quiet, and hardy to the degree of being able to subsist on any ordinary food. They give a large quantity of milk in proportion to their size and the food they consume, and the milk is of an excellent quality. Healthy cows, on good pasture, give 800 or 900 gallons in the year—although taking into account the younger and less productive, 600 gallons may be considered a fair average for the low counties and somewhat less for the high."

Stephens, in the "Book of the Farm," and in "the Farmer's Guide," speaking of the milking properties of the Ayrshires, says—"They are in such high repute on that account, that most of the nobility throughout the kingdom are furnished with Ayrshire cows."

In relation to their color, he says that, although red and white are most common, yet that sometimes a clear red or even those of a yellow or dun color, are to be seen—that such colors are known to be borne by stocks of the purest and oldest blood.

In regard to the yield of Ayrshire cows, Martin says, "It has been estimated that a good Ayrshire cow will yield for two or three months after calving, five gallons of milk daily; for the next three months, three gallons daily, and a gallon and a half for the next three months. This milk it is calculated will return about 250 lbs. of butter annually, or 500 lbs. of cheese. This is, however, somewhat exaggerated—four or four and a half gallons of milk a day is about the average product."

The author of "British Husbandry" remarks, in reference to this yield—"If equalled, we believe it will not be found exceeded by any other breed in the kingdom."

Youatt says, in relation to the Ayrshires, that they produce an unusual quantity of rich cream—that they feed kindly and profitably, that their fat is mingled with the flesh rather than separated in the form of tallow, and that they will fatten on pastures and in districts where others could not be made to thrive at all, except partly or principally supported by artificial food.

Dickson in his work "on the breeding of live stock," says of the Ayrshires—"The cows have obtained a world-wide celebrity as milkers, and are to be found in most of the dairies of noblemen and gentlemen, in every part of the kingdom."

The cow "Ayr," owned by Mr. Prentice near Albany, has given regularly, on grass feed only, over twenty quarts daily through the favorable season, and will milk the year round. This cow is of very small size and easily kept. Another of Mr. Prentice's cows—a grand daughter of the above, a five-year-old, produced in 1851, twelve pounds and seven ounces of butter in a week, without the least deviation from the ordinary treatment of the herd, on grass only.

In fact, whether the Ayrshires are judged by their actual produce, or by the external points which, by experience and observation, are acknowledged to denote dairy qualities, it must be admitted that they take a high rank; and it is believed that their adoption for the dairy would secure the following advantages over the stock commonly kept for that purpose in this country:

1st. A greater quantity and better quality of milk, for the food consumed.

2d. Better symmetry and constitution, greater docility of temperament, and tendency to gain flesh when not giving milk.

3d. Greater uniformity in the general character of the stock, from its inherent or hereditary qualities. V. V.

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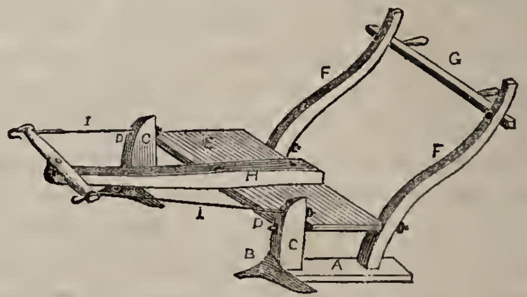
A Double Furrower

Eds. Cultivator—I send you the plan of a Double Furrower, which we have used five years. We find it very handy. It furrows twice as much as the old fashioned way. It can be set two, three, or four feet apart.



Explanation of the Cut.

A. The shoe made of plank, 2 inches thick.

B.B. Shares; same as those on a double mould board plow, bolted on the shoe.

C.C. These pieces are made of 2 inch plank, and morticed in the shoe.

D.D. These rods are made with heads on one end, and nut on the other. They pass through the stanchion, C. C., through the plank, E., and the upright, F., which forms a hinge; the holes are a little larger than the rods, and work freely.

G. Crosspiece, on which are two handles; it is bolted loosely on the uprights, and works same as plank, E.

H. Beam bolted firmly on the plank, E.

I. Rod to stiffen the beam.

The plank uprights and crosspiece, are 1½ inch stuff

It is necessary to have a wheel on the beam, the same as on a plow. A. T. James. *New-Rochelle, Westchester Co., N. Y.*, 1851.

Odds and Ends.

L. Tucker, Esq.—In remitting my animal subscription, allow me to avail myself of the kind and considerate invitation extended to your readers, towards the close of the article addressed to correspondents in this month's number, among whom I count myself as one more accustomed to guide the plow than the pen, although I certainly think you cannot blame the "weaker fry" for not showing their heads after having been accustomed to the strong and sterling articles from such pens as are wielded by Holbrook, Agricola, Norton, and a host of others. In reading your valedictary on the first page of this month's number, I was forcibly struck with the announcement that the "*twenty-first* year" of your labors as an agricultural editor, had now expired. Twenty-one long years spent in the promotion of an object, acknowledged by the wise and good of all ages and all nations, to be eminently worthy of the highest talent and the highest ambition.

What a host of interesting associations must cluster around the heart, when the scenes that have transpired during those long years, are by "fond recollection brought to the view." Think of the mighty influence which has been exerted, as the monthly leaves of the Genesee Farmer and The Cultivator have found their way to thousands of hearths and homes, scattered all over the land. Who can tell how many fields, long since made nearly barren under an exhausting system of cropping, have been once more made to blossom as the rose, and yield their rich burdens of golden corn, under the guidance of an improved practice as taught in the pages of those sterling journals, thus amply rewarding the labors of the husbandmen, and filling their hearts with food and gladness? And how many young men, think you, dazzled by the seductive influences thrown around the "professions," and the still more dangerous allurements of trade and speculation, have been brought to fall in love with agriculture, and in consequence are now enjoying the solid pleasures that cluster around the home of the intelligent cultivator of the soil, simply through the influence of these journals. Could the truth be known, I have no doubt that hundreds, if not thousands, of such young men could be found, who are to-day thankful that they were induced to follow this peaceful calling. Would to God there were thousands more. The perusal by one individual, of one article adapted to that individual's circumstances, has often been the means of great good to him and his family alone. Multiply this by the thousands of others who have read the same, and to whom it may have been equally a message of good, and tell me if you can the amount of human happiness that has been the result. Surely if the man who "makes two blades of grass to grow where but one grew before," is entitled to praise as a benefactor of his race, you, my dear sir, who have been for twenty-one years successfully engaged in this useful cause, can have no fears as to the verdict posterity will pronounce on you.

But much remains yet to be done. As has been well remarked, "the scientific practice of agriculture is yet in its infancy"—millions of acres of as fine land as ever lay beneath the sun, are year by year wasting away under the exhausting process of continual cropping, and their owners are either indifferent and careless about it, or else being aware of the real state of things are sighing for the fresh prairies of the west. Tell them of a better way, and they shake their heads dubiously, and tell you they "dont believe in book farming—the land is all worn out—never was good for nothing, and its no use." Ask them what they will take for their farms, and of a sudden they brighten up, and very complacently tell you, they think them worth from 30 to 40 dollars an acre, when not a mother's son of them is making two per cent on the money, and many actually running behind. Even in this comparatively young state, this is the condition of things, and an old and respected citizen remarked to me the other day, that he was well satisfied the *acreable* produce of even this county, (Trumbull,) which boasts a population as intelligent as any other, was yearly diminishing; and yet the majority slumber on regardless of future consequences. If Queen Victoria should send a graceless scape goat to set fire to some man's hay stack, the whole country would be burning up with virtuous indignation—but here is an annual waste of productive capability that cannot be measured by any thing less than thousands of stacks of hay, and yet but few regard it. I say but *few*, for we have some who are awake, and are trying to turn the current into a better channel. We have an agricultural society, that for a few years has been doing good, though the last fair was pronounced decidedly poor, and many as usual predict failure. The sovereign people can't afford to pay a shilling for the privilege of seeing a few pumpkins and squashes—not they—and this in the heart of "cheesedom"—but enough of this for present. Allow me, my dear sir, in closing, to congratulate you on the success which has attended you in the course of your long career as an agricultural editor, and may kind heaven spare your life at least as many more years, that you may not only continue to cheer the husbandman in his labors, but may see an abundant harvest as the result of your own. Buckeye. *Trumbull county, O., Dec.* 17, 1851.

A Model Farm School.

The want of a definite system of Agricultural Education, which has made the many discussions on this important subject, of little practical avail, is beginning to be remedied. In the Granite Farmer of Feb. 4, is an article headed "*A Model Farm School*," from the pen of Henry F. French, Esq., who has distinguished himself as a writer of clear, practical common sense, in the Horticulturist, and in different Agricultural Journals. The plan proposed has the merit of simplicity and practicability, features which are seldom combined in schemes of this kind. He proposes a farm of two hundred acres, differing as much as possible in soil, upon which should be erected a building with lecture-rooms, apparatus, library, &c., to accommodate some fifty students. A model farm-house, barn, and out-houses, to be constructed, and the farm stocked with the most approved breeds of domestic animals. A principal to have the entire control of the Institution, under the supervision of a Board of Agriculture appointed by the State, and to be thoroughly versed in every branch of scientific and practical farming. He would have so much of the elementary branches of instruction taught, as would enable the student to pursue successfully the higher branches of Chemistry, Natural Philosophy, Natural History, Veterinary Medicine and Surgery—the whole course of study to have especial reference to application on the farm, and all the labor to be performed by the students in rotation.

These are the principal features of the plan, as detailed in the article referred to. Could such institutions be founded in every state, or still better, in every county, they would be of immense value—would meet the wants of the great body of farmers. But there is still an imperative want of a nucleus to all these Model Schools—an Institution where teachers can be educated, and science pursued farther than would be possible on a farm. Yet we are by no means certain that these Model Schools should not be started first; for then the need of such a higher institution would be more keenly and generally felt

NEW PUBLICATIONS.

WALKS AND TALKS OF AN AMERICAN FARMER IN ENGLAND.—By the politeness of the author, FRED. LAW OLMSTEAD, we have received several proof sheets of a work, entitled as above, now in press by G. P. Putnam of New-York. Judging from the preface, and a hasty glance at a few pages, we are disposed to think well of it. It is written in a spirited style, with now and then a touch of humor to beguile the tedium of narration. The author, being a practical farmer, and having visited England for the purpose of becoming better acquainted with the condition of the laboring classes,—the systems of Agriculture peculiar to that country, and also of discovering what in their practice could be safely and usefully adopted here, comes before the reading world in a guise somewhat different from an ordinary tourist. A much truer exponent of the agricultural condition of a country can be obtained by direct association with the mass of farmers than by consulting the records of Agricultural societies and the laboratories of agricultural chemists. The author seems to have made his tour with this fact in view, and to have written faithfully and without prejudice, his observations. The book is neatly printed and illustrated by engravings of buildings, implements, &c.—250 pages, 12 mo.

HORSEMANSHIP, INCLUDING THE BREAKING AND TRAINING OF HORSES, is the title of a work, translated from the French of F. BAUCHER, published by A. HART, Philadelphia. It is devoted to directions for training horses to the saddle, and follows out the detail of every exercise with all the minuteness of the French mind. To equestrians, who wish to combine in an animal spirited action and perfect managibility, the rules laid down in this book, will be valuable. Horses need a competent tutor as much as a child, and were more careful and judicious training bestowed upon them in the outset, we should not see so many ill-bred vicious beasts, that defy every effort to make them serviceable.

LOSSING'S PICTORIAL FIELD BOOK OF THE REVOLUTION, is now nearly complete. Embracing, as it does, a succinct history of the American Revolution, with illustrations drawn from scenes of interest to every mind, it will be a valuable addition to every library. It is finely executed by Harper & Brothers.

HARPER'S MAGAZINE for February is, as usual, bountifully supplied with instructive and entertaining matter, including the continuance of of the biographies of Bonaparte and Franklin. It enjoys a large circulation, which is *prima facie* evidence of its popularity.

THE INTERNATIONAL, for February, gives brief biographies of COWLEY and FOX, together with engravings of their residences and favorite retreats. Among other excellent articles, we notice "Reminiscent Reflections of Chief Justice STORY," and the address of Dr. Francis at the printer's banquet in New-York.

LITTELL'S LIVING AGE holds a high rank among the literary periodicals of the day. Rejecting everything of a transient nature, it is a true representative of the literature and leading subjects of interest, both in Europe and our own country. Published weekly by E. Littell & Co., Boston, Mass., at $6 a year.

Agriculture the Mother of all Professions.

As the earth is the mother of all mankind, so agriculture is the mother of all other professions, and this I suppose is the reason why all other professions seek and find succor from their mother. It is natural for a child when it wants bread, to ask its mother for it—who else could it ask it of, with as much confidence? She is considered by all her children. rich in this world's goods. She has stores laid up for many years, and she has a good farm, and in their times of need it is natural for her children to expect assistance from her. On the other hand, the unnatural urchins never once spend a thought about *her* necessities, her hard labors, or of improving her condition. She is rich they say, she has stores of bread and meat, and she has a good farm,—she requires no aid from us. And thus it goes. Our good old mother has nothing to do but toil and sweat at her drudgery, provide bread and meat for all her children, and pay the *bills* for all manner of expenditures. Now these children do very wrong. They should assist the old lady in every possible way. They should encourage her work people and build good school-houses for them, and educate them; and they should give them Christmas and New Year's presents and curious trinkets, in the form of premiums, medals, and all sorts of fine things. This would stimulate them to serve the old lady more faithfully, energetically, and efficiently, and would render her days more cheerful and her nights more comfortable. Let all the world think of this. Only suppose the old lady should *die*, what would become of all of you professional men, merchants, mechanics, all? Where would you get bread and meat and clothing to your backs? Think of these things, and treat the dear old lady better, I beg of you. S.

PROFIT OF RAISING DUCKS.—A correspondent of the Rural New-Yorker, gives the following result of a small experiment with 14, four males and ten females:—

30 dozen eggs sold at 12½ cts. per dozen,......	$3.75
15 " " 10 " "	1.50
5 " " 12½ "	62
5 " used for setting " "	63.
3¾ " " in the family " "	47
4 lbs. feathers at 50 cts. (picked 5 times)	2.00
14 sold when dressed at 62½ cts. per pair, ...	4.38
	13,35
Deduct 6 bushels corn at 50 cts.,................	3.00
Profit,..........	$10.36

The cost of the required labor is not given. The eggs were placed under hens, and 51 hatched.

SETTING A ROGUE TO CATCH A ROGUE.—A correspondent of the London Farmer's Magazine says, that after resorting to all common expedients, to get rid of the fly that destroys turnips, without success, he succeeded by the following novel means. Taking the hint from tales of life in India, where certain species of ants infest every place, and reign supreme for the time, driving all before them, he went to the ant hills in the woods, and filled sacks of ants, and with gloves on his hands, turned them down in little heaps, at regular distances, over the field, where upon the enemy were exterminated.

Postage of the Cultivator and Cultivator Almanac.

We re-publish the following, from our Jan. No., and add a letter from the Department, deciding that the *Cultivator Almanac* is subject only to the *same charge as a single number of the paper itself*, when sent to subscribers.

Post-Office Department,
Appointment Office, Nov. 24, 1851.

Sir—I have received your letter of the 20th inst. The "Cultivator" is considered as being under the classification of a "newspaper," as that term is defined by the 16th section of the act of 3d March, 1845; and it therefore is entitled to all the benefits granted to, and subject to all the restrictions imposed by law on such publications.

Respectfully yours, S. D. JACOBS,
Ist Assist. P. M. Genl.

The postage on the Cultivator is therefore as follows:

For any distance not exceeding 50 miles,.........	5	cents *per year.*
Over 50, and not exceeding 300 miles,...........	10	cents *per year.*
Over 300 " 1,000 miles,..	15	" "
Over 1,000 " 2,000 miles,...........	20	" "
Over 2,000 " 4,000 miles,......	25	" "
Over 4,000	30	" "

To prevent any misapprehension we quote the 16th section of the law of 3d March, 1845, referred to in the above letter. It is as follows:

Sec 16. And be it further enacted, that the term "Newspaper," hereinbefore used, shall be, and the same is hereby defined to be any printed publication, issued in numbers, consisting of not more than two sheets, and published at short stated intervals of not more than one month, conveying intelligence of passing events, and *bona fide extras and supplements* of such publication."

By this extract it will be seen that the *Pictorial Cultivator Almanac* is entitled to go to our subscribers as a supplement to The Cultivator, it being a "*bona fide supplement*" to it, and nothing else. The Almanac is not published for sale, and is sent only to subscribers to the Cultivator.

Post-Office Department,
Appointment Office, Jan. 28, 1852.

Sir—I have received your letter of the 23d inst., asking whether the "Cultivator Almanac" ought to be considered as a Supplement to the Albany Cultivator, and rated with postage as such, or be considered as a transient publication, and rated accordingly.

A "Supplement," to come within the provisions of the law which allows such issues to be sent to subscribers at a postage equal to the sum paid on a single number of the principal publication, at subscription rates, ought not to exceed three ounces in weight, and should contain such matter only, as will supply that which is wanted to make the principal publication complete.

Upon examination of the "Cultivator Almanac," I have come to the conclusion that it may be considered as a Supplement to the Albany Cultivator. Respectfully yours, S. D. JACOBS,
1st Assist. P. M. Genl.

Jacob Allen, Esq., P. M. South Hartford, Washington Co., N. Y.

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Albany Prices Current.

Albany, Saturday, Feb. 14.

There has been a steady demand for flour and provisions during the month; the former under the influence of foreign advices, and the latter in consequence of the increasing certainty of a light stock of new Pork in the Western markets, have rapidly advanced. Wheat too has kept pace with flour.

FLOUR—The city and eastern demand for flour during the month has been good; the sales reaching 10,000 to 11,000 bls., at rates showing a gradually improving market. We quote State $4.50a$4.62½—for State and Western, $4.62½a$4.75—for favorite State and Western, $4.75a$4.87½—for Genesee and extra do. $5a$5.50. These figures show a large advance on the low grades.

GRAIN—Genesee wheat is now held at 118c.; the last reported sales were at 112½ on 7th inst. The transactions in other descriptions of grain are confined to street sales at 65c. for Rye, 36½a37c. for Oats, 63a64c. for Corn, and 72 was the last figure for Barley. A sale of 10,000 bushels Barley malt, was made early this month in p.t. Small Peas are 69c., Marrowfats $1.75. White Beans $1.50.

PROVISIONS—The retail demand for provisions is very good and prices have further advanced; we quote prime pork $14.50, mess do. $16, clear do. $17.50. Beef, $9.50 for mess and $5.50a5.75 for prime. Smoked beef 9½a10c. Smoked hams 9½a10½c., do shoulders 7½a8c. Butter 16a18c. for State and firm. Cheese scarce, 6½a7c. In dressed hogs the business is about closed; the last reported sale was at $7a $7.09. Yesterday a sale of 200 bls. city packed mess was made at $15.50 and within a few days 30,000 lbs. green hams at 9½c. The tendency of the market is upwards.

WOOL—The sales of the month are 100,000 lbs. at 41c. for mixed Ohio, 39 for Michigan, and including some lots on p.t.

HOPS are 30c. with sales 50 to 60 bales. Some 300 bales have been received at Philadelphia from England, and are in market at rates current in that city.

SEED—Not much doing. Large clover $6a6.12½. Timothy $2.50 a3,00 for fair to prime lots. Flax seed $1.12½.

New-York State County Ag. Societies.

Otsego.—At the annual meeting of this Society, at Cooperstown, Dec. 20, a deputation was received from the towns in the south and southwestern parts of the county proposing to abandon the society known for many years as the Butternuts Agricultural Society, and unite with the county society. After hearing the arguments for and against the proposition, which were given with candor and apparent good feeling, it was agreed to unite, and it was stipulated to hold the annual Fairs alternately at Louisville (Morris) and Cooperstown.

The society proceeded to the election of officers for the ensuing year, which resulted as follows:

President—Hon. SAMUEL S. BOWNE.

Vice-Presidents—Henry J. Bowers, John W. Tunnicliff, Edward Hall.

Treasurer—John T. Phinney.

Secretary—Chester Jarvis.

Executive Committee—Francis Rotch, R. H. Van Rensselaer, Williams Rathbun, David B. St. Sohn, Rensselaer Day, Thomas Jackson, Alexander H. Clark, Hiram Waite, Nelson H. Washbon, Richard Franchot, David Bundy, W. Frater, Jonah Davis, Joseph W. Ball, Abijah Barnum, S. G. Cone, F. A. Pearsall, Wm. A. Walker.

Cortland.—Officers of the Society for 1852:—Anthony Freer, Pres't.; G. W. Chamberlin, Paris Barber, Moses Kinney, and Manley Hobart, V. Presidents; Amos Rice, Homer, Cor. Sec'y; L. S. Pomeroy, Rec. Sec'y; M. L. Webb, Treasurer.

Jefferson.—Officers for 1852:—John A. Sherman, of Rutland, President; George White, Rutland, Curtis Goulding, Pamelia, John J. Green, Adams, Oliver Grow, Hounsfield, Mason Salsbury, Ellisburg, Joel Woodworth, Watertown, George J. Knight, Brownville, Eugene Blanc, Le Ray, Albert L. Kinney, Rodman, Wm. McCollister, Antwerp, Simeon Fulton, Wilna, Jason Clark, Alexandria, Levi Torrey, Cape Vincent, V. Presidents; Talcott H. Camp, Watertown, Treasurer; John C. Sterling, Watertown, Cor. Secretary; Edward S. Massey, Watertown, Rec. Secretary.

St. Lawrence.—We are glad to see the farmers of this county, awakening to the subject of agricultural improvement. At a meeting held at Canton on the 28th June, a County Ag. Society was organized, and the following officers elected:

Henry Van Rensselaer, Oswegatchie, President; Urial H. Orvis, Massena, Jonah Sanford, Hopkinton, and Hiram S. Johnson, Canton, V. Presidents; Henry G. Foote, Oswegatchie, Secretary; Ebenezer Miner, Canton Treasurer.

Galen.—This town, in Wayne co., has an efficient Society, as we learn by the proceedings at its annual meeting on the 12th Dec. last. They have established an Ag. Library, and will hold a Fair the ensuing season. Strong resolutions in favor of legislative aid to agricultural education were adopted, and the following officers chosen for 1852:—Isaac M. Gillett, President; D. Jennison, C. H. Bliss, M. D. Beattle, E. B. Kellogg, and B. H. Streeter, V. Presidents; Joseph Watson, Secretary; Thomas Plumtree, Treasurer, and L. S. Ketchum, Librarian.

VERMONT SOCIETIES.

Bennington County.—Officers for the year ensuing:—Charles Hicks, President; Jerome J. Hill, Martin, Wheelock, V. President; Norman Bottum, Treasurer; P. M. Henry, Secretary.

Addison Co.—Officers for 1852:—Hon. Harvey Munsill, of Bristol, President; Edwin Hammond, Middlebury, M. W. C. Wright, Shoreham, V. Presidents; Jos. H. Barrett, Middlebury, Secretary; E. S. Bottum, New-Haven, Ass't Secretary; Harry Goodrich, Middlebury, Treasurer.

Franklin County.—The annual meeting was held at St. Albans, on the 16th January, when the following officers were elected:—Decius R. Bogue, St. Albans, President; Anson Buck, St. Albans, Harmon Northrop, Fairfield, V. Presidents; Victor Atwood, St. Albans, Treasurer; C. H. Hayden, St. Albans, Secretary.

Premiums to Agents of the Cultivator.

As an inducement to those disposed to act as Agents, the following *Premiums* will be paid in Cash, Silver Plate, or Agricultural Books and Implements, to those who send us the largest list of subscribers for The Cultivator for 1852, previous to the *tenth of April next.*

1. To the one sending us the largest number, with the pay in advance, at the club price of sixty-seven cents each, the sum of Fifty Dollars.
2. To the one sending us the next largest list, the sum of Forty Dollars.
3. To the one sending us the next largest list, the sum of Thirty-Five Dollars.
4. For the next largest list, the sum of Thirty Dollars.
5. For the next largest list, the sum of Twenty-Five Dollars.
6. For the next largest list, Twenty Dollars.
7. For the next largest list, Fifteen Dollars.
8. For the next largest list, Ten Dollars.
9. For the next largest list, Five Dollars.
10. To all who send us Thirty Subscribers or over, and do not receive one of the above Prizes, a copy of The Horticulturist for one year.
11. To all who send us Fifteen Subscribers, and do not receive one of the above Premiums, The Horticulturist for six months.

◆

Every Subscriber an Agent.

All our Subscribers, as well as all Postmasters, are especially invited to act as Agents for our publications, The Cultivator and The Horticulturist.

NOTES FOR THE MONTH.

Acknowledgments.—Communications have come to hand, since our last, from A Subscriber in Orange Co., Verb. Sat, V. V., John Johnston, H. C. W., A. Baley, Egbert Cowles, A. D. H., Charles Schinz, Lyman Hall, Alfred Baylies, Woodford, C. H. Cleveland, F. M. R., C. R. Smith, C. D. B., J. W. Colburn, S. F., W. R. Manley, Morgan Butler, A. H. Avery, D. D. T. More, J. R. P., H. W. Bulkley, S. E. Todd.

Books, Pamphlets, &c., have been received as follows: Horsemanship, including the breaking and training of Horses, by F. Baucher, from the publisher, A. Hart, Philadelphia.——An Address before the Lancaster Co. (Pa.) Ag. Society, by James Gowen, Esq., from the Author.——Transactions of the Agricultural Societies of Massachusetts, for 1850, from Wm. Bacon, Esq.——Transactions of the Essex (Mass.) Ag. Society for 1851, from J. W. Proctor, Esq.——Address of Hon. M. P. Wilder, before the Berkshire Ag. Society, from the Author.——Transactions of Hampden Co. (Mass.) Ag. Society for 1851, from J. Brewer, Esq., Treasurer of the Society.

☞ Our correspondents, to whom we tender our grateful thanks, for their liberal favors, must have patience with with us. In due time they will all have a place.

An Agricultural Bureau.—Senator Doty of Wisconsin, has introduced into the U. S. Senate, "a bill to establish an Agricultural Bureau in the Department of the Interior"—which provides for the appointment of a Commissioner of Agriculture, whose duty it shall be "to collect agricultural statistics; to procure and distribute valuable seeds, cuttings, buds and tubers; to cause to be made all desirable analyses of minerals and mineral waters, and such as relate to the composition and improvement of soils; the feeding of domestic animals; the preparation and preservation of provisions and breadstuffs; the cotton and manufacture of flax, hemp, and sugar, and such other manufactures as may be connected with agriculture, and arise immediately out of agricultural products; and to prepare and make annually a full report to Congress containing an account of such experiments as may have been made, and such useful information as he may have obtained on all the subjects connected with the duties of his office." The bill also provides for the establishment of a chemical laboratory, the appointment of a chemist, clerks, &c. The plan appears to us to be a good one, and we would suggest to our state and county Agricultural Societies, the propriety of immediately sending in petitions in favor of its passage. We cannot believe that Congress would refuse the comparatively small appropriation necessary to carry it into effect, if a vigorous effort in its favor, was made by the friends of agricultural improvement throughout the country.

Large Fleece.—A correspondent at North Montpelier, (Vt.) says "we sheared a merino buck of the Atwood stock, last July—the wool, one year's growth, lacking one day. The weight of sheep before shearing was 121 lbs.—after shearing, 101 lbs. of carcass. 20 lbs. and four ounces washed wool—who can beat it?"

National Agricultural Convention.—Previous to our late State Fair at Rochester, the President, Hon. John Delafield, invited the attendance at that Fair, of the several Presidents of the different State Ag. Associations, for the purpose of consulting on the expediency of calling a National Convention, to consider the interests of agriculture, and to organize a National Agricultural Society, if deemed expedient. The call, however, was not responded to. Since then, the Massachusetts Board of Agriculture, and the Pennsylvania State Ag. Society, have both taken up the subject, and recommended the holding of a National Convention. At the last meeting of the Ex. Com. of the N. Y. State Ag. Society, the project was approved; and we hope those having the matter in charge, will issue their call with as little delay as possible. The influence of such a convention at this time, might secure the passage of the bill now before Congress, for organizing an Agricultural Bureau at Washington,—an object, we believe, very generally desired.

Massachusetts Board of Agriculture.—This Board organised the past year, by a convention of delegates from the several county Agricultural Societies in the State, is becoming, under the ever active labors of its President, the Hon. Marshall P. Wilder, a very efficient means of good to the state. Delegates were selected the last year, to attend all the County Fairs in the State; and at a recent meeting of the Board in Boston, the reports of the several Delegates were received. The efforts of the Board are also awakening a deep interest on the subject of agricultural education. At the late meeting, Mr. Wilder, from the Committee on Agricultural Education, submitted a series of resolutions, taking high ground on this subject, which were adopted; and a committee was appointed to present the same to the Legislature, and to urge the passage of such laws as may be necessary to carry out the principles and views contained in them. They ask for the establishment of a State Department of Agriculture, with officers commensurate with the importance of the duty to be performed; suggest the propriety and expediency of reserving a portion of the proceeds of the sales of the public lands, and devoting such sum to the promotion of Agricultural Science; and in short claim for Agriculture the same fostering care which is bestowed upon other interests.

Virginia State Agricultural Society.—An important movement has been made in the Legislature of Virginia, which, if its object be consummated, will be one of the most important "Acts" of that great commonwealth. A bill has been introduced into the House of Delegates to incorporate a State Agricultural Society, and providing for the establishment of district societies throughout the State. The bill proposes to endow each district society with an annuity from the public treasury, on condition that an equal sum shall be annually contributed by individuals. There is no state in the Union in which such a movement will be more beneficial, none affording so large a field for its beneficent action; there is not a state in the whole confederacy that has so much land in an unimproved, and almost unproductive state, and not one that has the means of improvement in so cheap and accessible a form. Nothing is wanted in Virginia but the *spirit*, to make her the very first in agricultural states. Her soil is capable of any degree of improvement; her climate is all that can be desired. She has all the means at hand, and only requires the will, to put the willing hand to the plow, and the strong arm to the reaper, and then to gather the largest harvest of any of her sisters.

Vermont State Ag. Society.—We notice by the *Middlebury Register*, that at the late meeting of the Addison County Agricultural Society, a discussion arose as to the propriety of sustaining their State Agricultural Society. It was stated that fears were entertained that the existence of the State Society would prove injurious to the County Societies. Such has not been the result in this state. On the other hand, our State Society has given new vigor to the county associations previously existing, and has led to the organization of others in almost all the counties in the state. In no one particular has the State Society's influence been more beneficial, than in its favorable effects upon the county societies; and we are glad to see that a resolution, in favor of sustaining their State Society, was adopted; and we trust that the other county societies in Vermont will do all they can to aid in carrying into effective operation their state association.

Insects on the Plum Tree.—We have been kindly furnished by John Lloyd, with specimens of an insect which he supposes to be the cause of what he terms the "canker," or black knot, on the plum. We hope he will excuse us for differing from him as to this insect causing this disaster, as in a multitude of instances the excrescences arise without the slightest external injury, while the punctures of this insect, which appears to be allied to the Cicada, or American Locust, are quite conspicuous. He will, however, please accept our thanks for the results of his observations, as examinations of this kind are always interesting, and if pursued, cannot fail to lead to useful results. We have observed the punctures of other species of this order of insects upon the plum and cherry, more formidable in appearance, which never produced any disease or excrescence, whatever; and indeed, it is rare that injuries of this kind ever produce anything of the sort, with the exception of those like the gall insect, which are of a very local character.

The Locusts.—Dr. Gideon B. Smith, of Baltimore, says the Seventeen-Year Locusts will appear this year in Connecticut, east of the river, in portions of Tolland, Middlesex, and Hartford counties, and probably other counties north; and in Massachusetts, in Franklin, Bristol, and Hampshire counties, especially about Fall River. They will leave the earth early in June, and may be found any time in May, by shoving off the top soil in places where trees or shrubbery grew in 1835, in those districts. The Connecticut district is not connected with the Massachusetts district. There is also a district in Massachusetts, in which they will appear in 1855, (about Barnstable, for example,) and another in Connecticut in which they will appear in 1860. This district extends westwardly from the Connecticut River to New-York, and north-westwardly east of the Hudson River, to Washington county, N. Y.

Downing's Country Houses.—A friend, in a private letter, says, "Your correspondent, 'C. L.,' wishes to build a farm-house, costing from $800 to $1000, and requests a plan. I would suggest to you the propriety of informing him that Downing's Architecture of Country Houses, would be a valuable work for him in the present exigency. Even if he does not find a plan exactly suited to his taste, he may find information and suggestions that would be worth ten times the cost of the book, while building his house." The price of the work, is $2, and no man should undertake to build a house without consulting it.

Hasty Conclusions.—Men are too apt to draw general conclusions from particular and local facts. We observed lately an example in an exchange paper, where a correspondent had tried the mode, strongly recommended, of hanging up his cabbages by cords in his cellar for fresh keeping through winter. They withered, shrunk, and became worthless. The fault was in his cellar—like most other cellars, it was too dry for this purpose—with some which are quite damp, it succeeds well. We have kept cabbages through winter in fine condition, in a cellar not moist, by placing them closely together in one layer on boards laid on the bottom, and under the apple shelves, which occupied the central portion. They were in a moist part of the cellar, and the circulation of air, as when suspended, could not dry them rapidly. With other cellars, perhaps, this mode would prove a failure.

Dissolving Bones with Sulphuric Acid.—The receipts for this operation, direct to use a proportion of sulphuric acid equal to half the weight of the bones. Professor Anderson, chemist to the Highland Agricultural Society, thinks this quantity of acid is larger than is needed. He recommends, where the preparation of bones for manure is carried on to much extent, that a cistern lined with lead, (though wood only will answer,) should be provided, and a watering-pot, made of lead. The proportions of materials are—one ton bones, one-quarter ton of sulphuric acid, one-quarter of a ton, or 60 gallons boiling water. A small quantity of bones should be spread on the bottom of the cistern, and the sulphuric acid gradually poured on from the watering-can. Throw in more bones, and more acid and water, managing the process so as to mix the bones, water and acid, as uniformly as possible. The mixture should be allowed to stand for some days before it is used, and should then be mixed with dry peat or soil, to render it sufficiently dry for use. It may be kept any length of time under cover, without loss.

Devon Cattle.—We saw recently, on their passage through this city, two very fine Devon heifers, purchased by Mr. L. H. Colby, of Scipioville, Cayuga county, of Mr. Lewis Trall, of Torringford, Conn. They were bred by Mr. T., from the stock of the Messrs. Hurlburt, of Winchester, whose herd of Devons is so well known throughout the country.

☞ The attention of those who wish to engage largely in farming operations, and other matters connected with it, is invited to an advertisement in our present number, from Illinois, which appears to afford a fine opportunity for an expert business man.

Preserving pure Seed.—James Webb, near Cambridge, England, (says the editor of the Michigan Farmer,) who had a 200 acre wheat-field just ready to cut, promising 40 bushels per acre, raises "all his seed-wheat in a field by itself on a distant part of the farm, from picked ears or heads, the best only being selected and picked out by hand. In this way he not only improves the quality of his wheat, but effectually excludes all foul stuff." We should like respectfully to ask friend Isham if he succeeds in perfectly excluding *chess*—and whether wheat changes as badly to this weed in England as in Michigan?

The Boston Cultivator.—We learn that Mr. James Pedder, who has for some years been the agricultural editor of this journal, has not left it, as we supposed; and that hereafter that department is to be in the joint charge of Messrs. Pedder and Howard.

Straining after large Statements.—It is not unusual, in giving statements of the extraordinary growth of pear trees, pumpkin-vines, &c., to sum up together the several lengths of all the branches. This cannot give the reader any definite idea of the real linear growth made by the main shoot—one good strong shoot is often better than twenty weak and slender ones, and ought to tell as well on paper. Whoever thinks of measuring the height of the stalks of wheat, by reporting the aggregate length of a dozen stalks from one stool; or of the growth of a cabbage by the united breadth of all the leaves?

Fine Sample of Oats.— Mr. P. J. Vandevere, of West Glenville, Schenectady county, has exhibited to us a very fine sample of the Black Tartarian Oats, grown on his farm the past season. The stalks were about six feet high. We believe he left some of them for sale at Messrs. Emery & Co.'s, in this city.

Albany and Rensselaer Hort. Society.—The annual meeting of this Society was held February 4th—V. P. Douw, Esq., President, in the chair. Officers for 1852 were elected, as follows:

President—HERMAN WENDELL, M. D.
Vice Presidents—E. P. Prentice, B. B. Kirtland, D. T. Vail, Wm. Newcomb.
Secretary—B. P. Johnson.
Treasurer—Luther Tucker.
Managers—V. P. Douw, J. McD. Mc ntyre, J. M. Lovett, L. Menand, E. Corning, Jr., C. P. Williams, A. F. Chatfield, J. S. Gould, E. Dorr.

The constitution of the society was amended by making the annual fee of membership $1, instead of $2, as heretofore.

Meetings and exhibitions for 1852, are to be held on the 22d June, 6th July, and 14th and 15th September. Annual meeting, third Wednesday of February, 1853.

A premium list for 1852 was adopted. This is to be printed in pamphlet form.

There was a fine show of plants and flowers, principally from the green-houses of Messrs. Erastus Corning, Jr., L. Menand, James Wilson, and the President, V. P. Douw, Esq.

Poultry Show at Cincinnati.—We have been favored with the report of a Poultry Exhibition held at Cincinnati, in December last, from which we infer that the "Chicken fever" has commenced its ravages among the Buckeyes. In the variety and beauty of the birds, it appears to have equalled the Boston exhibitions, though less in numbers. At its close, a "Western Society for the Improvement of Domestic Poultry," was organised.

Confined Poultry.—The Ag. Gazette says that if poultry are cooped up to fatten, "they will do well up to 12 or 14 days. Keep them in coops beyond this time, and feed them as you like, and they will grow leaner every day until they die." Close confinement produces a similar result on men and most other animals, at least to some extent.

Plowing Head-Lands.—We observe that this is often inconveniently and awkwardly done. The best way is to leave strips of untouched land at the sides as well as at the ends of the field, all of equal width, and then the whole is finished by going round with one continuous furrow until it is finished close to the fence. In this way none of the newly plowed ground is trodden hard.

Catching Hawks.—A Michigan correspondent of the Genesee Farmer, catches hawks with great facility by erecting a tall post near the poultry-yard, and in an open piece of ground, on which a *smart* steel trap is secured by a short chain. The intruder will be sure to take his stand there, to make his observations, and as soon as caught he should be quickly removed, so as not to alarm others. We should feel much reluctance to destroying this useful bird, so long as snakes, mice, &c., are nuisances, and would only resort to the above from necessity. We believe birds generally are the farmer's best friends; the only exception we make being in case of those who despoil the fruit crop.

Draining in Indiana.—Gov. Wright, in his address before the Wayne county Agricultural Society, estimates the amount of marshy lands in Indiana at three million acres. These were generally avoided by early settlers as being comparatively worthless, but when drained they become eminently fertile. He says, "I know a farm of 160 acres that was sold five years ago for $500, that by the expenditure of less than $200, in draining and ditching, the present owner refuses now $3000." Again, he says, "I have a neighbor who informed me that in 1850, a very dry season, he had ditched a field that he had previously put in corn; in the low and wet parts of the field he usually gathered in the fall a few nubbins, but went to the high ground for his crop. In the fall of last year, he obtained his best corn from the low land, his worst from the high; and the *extra* crop of the year paid for the whole expense of ditching."

Prouty and Mears' Plows.

A LARGE assortment can be found at the State Agricultural Warehouse, No. 25 Cliff street, New-York.
March 1—2t. LONGETT & GRIFFING.

GUANO.

WE have now received our supply of Peruvian Guano, put up in bags, averaging 160 lbs each.

Bone Dust put up in barrels, sawings, turnings, and crushed, $2.25 per barrel.

Bone Coal, Poudrette, Plaster of Paris, Sugar-house Scum, Potash, &c. &c. For sale by LONGETT & GRIFFING,
March 1—2t. No 25 Cliff street, New-York.

Colman's European Agriculture.

EUROPEAN AGRICULTURE, from personal observation, by Henry Colman, of Massachusetts. Two large octavo vols. Price, when neatly bound, the same as published in Nos., $5. For sale at the office of THE CULTIVATOR.

Highland Nurseries, Newburgh, N. Y.

A. SAUL & CO. have the pleasure to announce to their *patrons*, and the *public in general*, that their stock of

FRUIT AND ORNAMENTAL TREES, SHRUBS, &c.,
which they offer for sale this spring, is of the very best quality, and embraces everything in their line that can be procured in the trade.

Dealers and Planters of trees *on a large scale*, will be treated with on as liberal terms, as can be done by any establishment of reputation in the country; they flatter themselves that for correctness of nomenclature of fruits, (which is a serious consideration to planters,) that their stock is as nearly perfect as can be, having all been propagated on their own grounds, *from undoubted sources*, under the personal supervision of Mr. Saul.

They have propagated in large quantities, *all the leading and standard varieties*, which *are proved* to be best adapted for general cultivation, especially those recommended by the American Pomological Congress, at its several sessions, as well as all *novelties*, and certain kinds particularly suited to certain sections and localities of the Union, and the Canadas.

Their stock of Pear Trees is the largest they have ever had to offer for sale, and among the largest in the country, and consists of over 50,000 saleable trees.

The stock of Apple Trees is also very large, as well as Plums, Cherries, Apricots, Peaches, Nectarines, and Quinces, also Grape-vines, Gooseberry, Currant, Raspberry, and Strawberry plants in great variety, &c., &c.

Also Pears on Quince, Cherry on Mahaleb, and Apple on Paradise stocks, for Pyramids and Dwarfs for garden culture, and of which there is a choice assortment of the kinds that succeed best on those stocks.

Deciduous and Evergreen Ornamental Trees and Shrubs.

100,000 Deciduous and Evergreen Ornamental Trees, embracing all the well known kinds suitable for street planting, of *extra size;* such as Sugar and Silver Maple, Chinese Ailanthus, Horse Chestnut, Catalpa, European and American Ash, Upright lentiscus leaved Ash, Upright Gold Barked Ash, Flowering Ash, Three Thorned Acacia, Kentucky Coffee, Silver Abele Tree, American and European Basswood or Linden, American and European Elm in several varieties, &c. Also all the more rare and select, as well as well known kinds suitable for Arboretums, Lawn and door-yard planting, &c.; such as Deodar and Lebanon Cedars; Araucaria or Chilian Pine; Cryptomeria japonica; the different varieties of Pines, Firs, Spruces, Yews, Arborviteas, &c.

WEEPING TREES.—New Weeping Ash, (Fraxinus lentiscifolia pendula,) the old Weeping Ash. gold barked Weeping Ash, Weeping Japanese Sophora, Weeping Elms (of sorts.) Umbrella Headed Locust, Weeping Mountain Ash, Weeping Willow, Large Weeping Cherry, Weeping Birch, Weeping Beech, &c., &c.; together with every variety of rare Maple, Native and Foreign; Flowering Peach, Almond and Cherry; Chestnuts, Spanish and American; Purple and Copper Beech; Judas Tree, Larch, Gum Tree, Tulip Tree, Osage Orange, Paulownia, Mountain Ash, (American and European,) Magnolias of sorts, with many other things—including some 200 varieties of Shrubs, Vines, Garden and Climbing Roses in great variety: such as Hybrid Perpetuals, or Remontants, Hybrid China, Hybrid Bourbon, Hybrid Damask, Hybrid Provence, Bourbon, Tea, China, Noisette and Prairie Roses; also Herbaceous Plants in great variety, &c., &c., for which see Catalogue, a new edition of which is just issued, and will be forwarded to all post-paid applicants.

A large quantity of Arborvitæ for Screens, and Buckthorn and Osage for Hedge plants.

Newburgh, March 1, 1852—2t.

NOTICE.

THE UNDERSIGNED has disposed of his interest in the State Agricultural Warehouse, No. 25 Cliff street, to Mr. A. LONGETT, who will in future conduct the business on his own account.

New-York, March 1—1t. GEO. H. BARR.

Ayrshires for Sale.

THE subscriber offers the following Ayshrire Stock for sale, viz: One Heifer 3 years old, (*in milk*,) from the celebrated imported cow "Whitey," imported by the late R. S. Griswold, Esq. Also, one Heifer Calf, 9 months old, from the above named Heifer, got by Governor 3d, who was out of the celebrated cow "Lady Rose," also imported by Mr. Griswold.

Price for the two $125, if applied for before the first day of April.

E. M. WOODFORD.

Cottage Farm, West Avon, Conn., March 1, 1852—1t*

1,000 Agents Wanted.

HEADLEY'S LIFE OF KOSSUTH.

JUST PUBLISHED, the Life of Louis Kossuth, Governor of Hungary, with notices of the Distinguished Men and Scenes of the Hungarian Revolution. To which is added an Appendix, containing Kossuth's Address to the People of the United States; and the most important of the addresses, letters, and speeches of the Great Magyar Chief. By P. C. Headley, author of "Life of Empress Josephine," "Life of Lafayette," etc., with an introduction by Horace Greely. In one elegant 12mo volume of 461 pp., with an accurate steel portrait. Price $1.25

N. B. Agents wanted in every county in the United States, (not already occupied.) to sell the above popular work. It is believed that almost every *reading* family will be glad of the opportunity of possessing the Life and Speeches of the noble Hungarian. Such is the present indication from the unparalleled sale of the work.

Address DERBY & MILLER, Auburn, N. Y.

A single copy sent by mail, *free of postage*, on receipt of the price, post-paid. March 1—2t.

GREAT COLLECTION OF FRUIT TREES.

HOVEY & CO., Cambridge Nurseries, near Boston, Mass.,

INVITE the attention of cultivators of choice fruit to their very extensive collection of fruit trees, of all kinds, more particularly of pears, embracing every variety worthy of cultivation, to be obtainede ither in Europe or this country. Of all their immense varieties, *specimen* trees have been planted out on the borders of the walks, numbering more than *twelve hundred* trees, most of which are now in bearing, affording a fine opportunity for the inspection of the fruit.

EIGHTY THOUSAND PEAR TREES,

are now offered for sale, embracing all the popular, proved, and well known sorts, as well as every new variety, of recent introduction. Their stock is unusually fine this year, and they invite the attention of dealers and fruit cultivators to their very extensive collection. Trees of all sizes, from *one* to *seven* years old, both upon the quince and pear stock.

3,000 splendid trees of Swan's Orange, or Onondaga, one of the largest and best of autumn pears, one to five years old, many of them full of fruit buds.

6,000 extra sized *pyramidal* trees on the quince, four to six years old, and full of fruit buds.

Apples.—Upwards of 200 varieties, including all the new and superior sorts.

Cherries.—More than 75 of the very finest kinds in cultivation.

Plums.—Upwards of 60 varieties, including among them the McLaughlan, Gen Hand, Reine Claude de Bavay, Drap d'or Esperin.

Peaches.—Nearly 80 choice sorts, embracing Stetson's Seedling, White Ball, Reine des Verges, &c.

Apricots, *Nectarines*, and *Quinces* of all the best kinds.

Raspberries, *Strawberries*, *Currants*, *Gooseberries*, &c. in variety.

Improved High Blackberry, one of the finest fruits in cultivation

Grapes.—Sixty varieties of the finest foreign kinds; all cultivated in pots and suitable for graperies; also the DIANA, which H. & Co. first introduced into notice, and which has proved to be the most valuable native grape.

Figs.—Twelve of the best sorts, including the Black of St. Michaels, Nerii, &c.

Scions of the best kinds of Pears, Apples and other fruits.

Stocks for fruit trees, of the Pear, Apple, Quince, Plum, Cherry, &c., by the 100 or 1000.

Hedge Plants—30,000 Buckthorn, Privet, Arborvitæ, &c. Also, a great collection of all the finest

Ornamental Trees, Shrubs, and Evergreens.

Among which are the following rare kinds:

Weeping Trees.—Weeping Mountain Ash, Weeping Elm, Weeping Lime, (3 sorts,) Weeping Ash, Weeping Poplar, Weeping Cherry, (2 sorts,) &c.

Rare Shrubs.—Weigelia Rosea, Forsythia Viridissima and Spiræa Prunifolia Pleno, three new and elegant shrubs, by the dozen or hundred. Berberis Purpurea, an unique purple leaved variety, with foliage as dark as the purple beech.

Rhododendrons and Azaleas.—A splendid collection of upwards of 60 varieties, *all perfectly hardy*, and the most magnificent shrubs.

Oaks.—Quercus Fastigiata and Purpurea, two elegant trees, of rapid growth.

Evergaeen Trees.—Deodar Cedar and Cedar of Lebanon, Araucaria, Juniperus Pendula and Suicicea, Siberian Arborvitæ, Pinus Cembra, Cryptomeria Japonica, &c.

Roses.—600 varieties, including 20 sorts of Prairies.

Mahonia Aquifolium, one of the most beautiful evergreen under shrubs, *perfectly hardy.*

Vines and Climbing Plants.—Common Irish Ivy, Large Leaved or Giant do., Gold and Silver Striped do. Wistaria Sinensis, Lonicera Brownii, and other sorts. Clematises in variety, &c., &c.

And a splendid collection of

Green-house Plants, Hardy Perennial Flowers, &c.,

among which 200 varieties of Camellias; 25 of Azaleas; 50 of Pelargoniums; 50 of Verbenas; 600 of Roses; 25 of Carnations; 50 of Phloxes; 30 of Pæonies; 200 of Dahlias, the rare Japan Lilies, &c. &c. Messrs. H. & Co. have been awarded the *highest premiums* by the Mass. Hort. Society, for Roses, Carnations, Azaleas, Camellias, Phloxes, Rhododendrons, Pelargoniums, &c.

☞ Catalogues will be forwarded by mail to all post-paid applicants.

A liberal discount to dealers and to gentlemen purchasing large quantities.

☞ Trees packed safely for transportation to any part of the United States. Address

March 1—2t. HOVEY & CO., 7 Merchant's Row, Boston.

Black Hawk Colt.

THE BLACK HAWK COLT RAVEN, will stand at the stable of the subscriber, the ensuing season, for the service of a limited number of mares. Raven will be four years old the first of June next. He resembles his noted sire closely, except that he is larger, weighing at this time about 1100 lbs. He gives promise of making an extraordinary trotter, and is one of the *very best* of the Black Hawk Colts. His dam is a much admired Morgan mare—great grandsire, Cock of the Rock.

The subscriber also offers for sale his Two-Year Old Stallion Colt, Falcon; sire, Falcon—grandsire, Black Hawk—dam, a well blooded Virginia mare. Falcon is a very beautiful animal, possessing in a remarkable degree the Morgan characteristics—of a kind and docile temper, already well broke to the harness, in which his action is bold and elegant. If he is not sold he will remain at the stable of the subscriber for the coming season. ROBBINS BATTELL.

Norfolk, Conn., March 1, 1852—3t.

SYRACUSE NURSERY.

AMERICAN HOLLIES, DEODAR CEDARS, &c.

THORP, SMITH, HANCHETT & CO., of the Syracuse Nurseries, offer for sale this spring,

American Holley, grown from seeds, from one to three feet high; fine plants.

Virginia Fringe Trees, from 2 to 6 feet high.

Deodar Cedars, from 4 to 5 feet high; $2.

Cedar of Lebanons, from 4 to 6 feet high; $2.

Norway Firs, very handsome—by 100 or 1000.

Balsam Firs, from 1 to 5 feet—stocky and well furnished, very handsome.

Swedish Junipers, very fine—3 feet high.

Cryptomeria Japonica, and Auricaria Imbricata, from 1 to 5 feet.

Taxodium Sempervirens, a beautiful weeping Evergreen Tree from California, 3 to 5 feet high.

Dwarf Apples, very stocky and fine, 3 to 5 feet high—50 cts. each.

Cherry and Victoria Currants, a very large stock on hand.

Strawberries of all the best leading sorts.

Dahlias—all the leading new sorts, comprising 100 select varieties; price in pots 25 cents—$2 per dozen—of whole roots, 25 cents each. $20 per 100.

Roses.—We have no hesitation in saying we have one of the very best stocks in the U. States, consisting of 8000 plants, of the choicest Perpetuals, Teas, Bourbons and Noisettes, including all the novelties of the day, with 100 choice varieties imported from England, France, and Belgium. There is no good Rose that our collection does not contain. Fortune's China, 50 cents—Green Tea, 50 cents. Good, older sorts, $3 per dozen. We also have *Tree Roses*, from 3 to 5 feet high, some marked with two distinct colors, as well as Weeping Roses, from 5 to 7 feet high.

Ornamental Shrubs.—Wegelia Rosea, Forsythia Viridissima, Ribes Beatoni, Sanguineum and Albidum.

Spireas.—Prunifolia, Lindleyana, Douglassii, Reevesii, &c.

Hardy Climbers.—Chinese Bignonias and Glycines, very strong—Grecian Periploeas, Sweet Scented Clematis, Honeysuckles, 16 varieties Double Michigan Roses.

New Verbenas.—Heroine, Madam Clovet, Adile, Morpheus, Clotilde, Lady of the Lake, Striped Eclipse, Phæton, Ariadne, Madam Gourney, Beauty of Rye, Royal Purple, White Perfection, with the good older sorts, Defiance, Reine de Jour, St. Margaret, Iphegene, &c., $2 per dozen—$12 per hundred.

New Fuchsias.—Spectabilis, Serratifolia, Acteon, The Rajah, Purity, Eliza Mielliez, President Porchier, Elegantissima, Sir H. Pottinger, Cheateaubriand, Prince of Orange, &c., &c., $3 per dozen

New Petunias.—Eclipse, Prince of Wales, McMinii, Enchantress, North London, Madonna, Hebe. &c., &c., $2 per dozen.

New Cinerarias.—Jettes Treffez, Climax, Cerito, Nymph, Scottii, Adile Villars, &c., &c., at $2 to $3 per dozen.

Herbaceous Plants.—Splendid Carnations. Picotees, Phloxes, Napolitan Violets, Forget-me-nots, Double White Lilies, &c., at the lowest rates—with a full collection of all the rarest Green-house plants

Remember that no worthless article is sent from this establishment.

The Editor of the Horticultural Review, published at Cincinnati, says, in the November number, that the handsomest bundles of the prettiest trees imported into Cincinnati last fall, came from our Nurseries.

Our Descriptive Catalogue sent to post-paid applicants enclosing postage stamps. THORP, SMITH, HANCHETT & CO.

Syracuse, March 1, 1852—1t.

N. YORK AGRICULTURAL WAREHOUSE.

A. B. ALLEN & CO.,

189 and 191 Water Street, New-York.

PLOWS of a great variety of patterns and different sizes, calculated for sward and stubble land, wet meadows, and recently drained swamps where roots abound. Among these plows, also are the deep-breaking-up, flat-furrow, lap-furrow, self-sharpening, side-hill, double-mould-board, corn, cotton, cane, rice, and subsoil with single or double wings.

HARROWS, triangular, square, Geddes, and Scotch.

ROLLERS, with iron sections one foot long, and of different diameters. These can be arranged on an iron shaft for any required width.

CULTIVATORS of upwards of twenty different kinds, steel tooth and cast iron.

SEED SOWERS of six different kinds and prices.

HORSE POWERS, endless chain and circular, of wood and cast iron.

THRESHERS, with or without Separators.

GRAIN MILLS of cast iron, and burr stone, to work either by hand, horse or water power.

CORN SHELLERS, single and double, large and small cylindrical to work by hand or otherwise.

STRAW CUTTERS, spiral, straight, or circular knives.

VEGETABLE CUTTERS for turneps and other roots.

Together with a great variety of all other Agricultural and Horticultural Implements kept in the United States, such as Hoes, Shovels, Spades, Rakes, Manure and Hay Forks, Grain Cradles, Scythes, Snaths, &c. &c.

CASTINGS of all kinds for Plows, Cotton Gins, and Sugar Rollers.

WAGONS and *CARTS*, for horse, ox, or hand.

STEAM ENGINES for farm and other purposes.

Our implements occupy three large stores, and we believe they make up the largest and most complete assortment in America. In addition, we have a machine shop employing upwards of one hundred men, where any articles in our line can be made to order.

A. B. ALLEN & CO.,
Jan. 1, 1852—tf. 189 and 191 Water st., New-York.

Farmers', Gardeners', and Planters' Store.

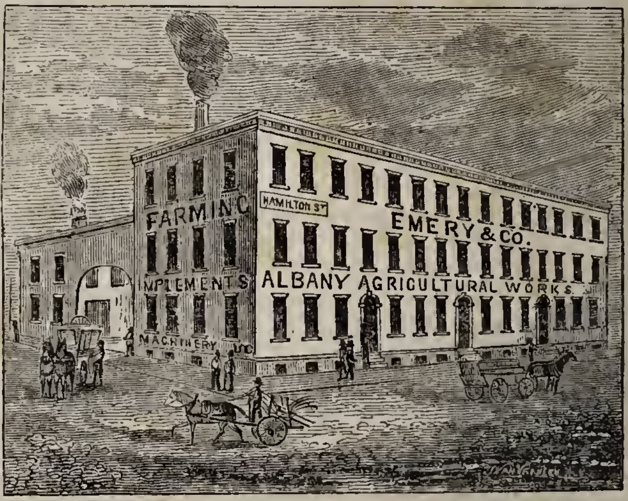
A. G. Munn.] **A. G. MUNN & CO.** [Wm. Garnett.

530 Main Street, Four doors below Third, Louisville, Ky. All kinds of Garden, Flower, Field and Grass Seeds, and every variety of Agricultural and Horticultural Implements constantly on hand, wholesale and retail. Also, Agents for the different Nurseries in the vicinity. Orders from abroad promptly attended to. Cash paid for Flax Seed, Mustard Seed, &c. Fresh Osage Orange Seed. Also, Osage Orange Plants.

2000 bushels Kentucky Blue Grass, 500 bushels Kentucky Orchard Grass, 100 bushels Kentucky Red Top, 500 bushels Millet, 1000 bushels Kentucky Hemp Seed, 100 bushels Osage Orange Seed, 50,000 Osage Orange plants.

N. B. We send men every fall to Texas, to get our supply of Osage Orange Seed, and can therefore recommend it.

March 1—1t.



ALBANY AGRICULTURAL WORKS,

Hamilton, Liberty, and Union-streets.

THE subscribers are the originators and sole proprietors of the above works, which embrace a very large collection of labor-saving Machinery, not excelled in this country for facilitating the manufacturing of Agricultural Machinery to any desired extent, and with uniform accuracy and despatch.

WAREHOUSE AND SEED STORE,

369 and 371 Broadway.

Our Warerooms are among the most spacious in the city, and collection of articles on hand large and new—most of the Implements being of our own manufacture, and the Seeds grown for our own trade.

Field and Garden Seeds.

The subscribers are receiving, and have on hand, a choice lot of Field Seeds, composed in part of

Black Sea Spring Wheat, both red and white chaff.
Italian and Hedge Row Spring Wheat.
Spring Rye and Barley.
Black Tartarian and Poland Oats, very superior for weight and quality.
Broom Corn Seed, superior quality.
Clover, large, small, and white Dutch.
Red Top, northern and southern.
Timothy and Orchard Grass.
Flax and Hemp seeds.
Tobacco Seed, Broad and Long leaf.
Peas—a choice assortment of Garden Peas.
Field and Garden Peas.

Also a choice assortment of fresh GARDEN SEEDS, warranted true to their name. The attention of Gardeners is particularly called to the assortment.

EMERY & CO.'S

New-York State Agricultural Society's

FIRST PREMIUM

RAILROAD HORSE POWER,

AND

OVERSHOT THRESHER AND SEPARATOR.

THE above Horse Powers have been awarded the highest Premiums at the Fairs of the New-York State Agricultural Society in 1850, and again in 1851; also, the highest Premium of the Michigan State Fair, at Detroit, Mich., in September, 1851, where a majority of the Committee owned and were using Wheelers' Powers on their farms, having purchased them previous to seeing our own; also a Gold Medal at the American Institute in 1851. It was also exhibited at the State Fairs of Ohio, Maryland, and Pennsylvania, and received the highest awards which could be given by the rules of their Societies. In every case, it has been in competition with all endless chain Powers of any note in this country—among which were Wheeler's Rack and Pinion. All of our Powers have the name, EMERY & CO., cast upon every link of the chain and hub of band-wheel. None others are genuine.

All the above are offered on liberal terms, at wholesale or retail, at the *Albany Agricultural Warehouse and Seed Store*, 369 and 371 Broadway, Albany, N. Y.

Catalogues gratis, on application. EMERY & CO.

March 1, 1852.

ISABELLA GRAPEVINES,

OF proper age for forming vineyards, propagated from and containing all the good qualities which the most improved cultivation for over 12 years, has conferred on the vineyards at Croton Point, are offered to the public.

Those who purchase, will receive such instructions for four years, as will enable them to cultivate the Grape with entire success, (provided their localities are not too far north.) Dr. R. T. Underhill feels quite confident that he has so far meliorated the character and habits of the Grapevines in his vineyards, and nurseries, by improved culture. pruning, &c., that they will generally ripen well, and produce good fruit in most of the northern, and all the western, middle, and southern states.

From the experience of the past season, he is fully convinced that where his directions are strictly foilowed in planting the vineyard, and in its subsequent management, a good crop of Isabella Grapes may be ripened in a very unfavorable season. All communications, post-paid, addressed to R. T. UNDERHILL, M. D., Croton Point, Westchester Co., N. Y., will receive prompt attention.

March 1—1t.

Favorable Opportunities for Persons who seek

Rural Life, and Occupations adapted.

THE advertiser desires to have join him, one, two, or more persons, in carrying on one of the largest, best situated Farms, and in point of soils, and other advantages, not surpassed in the United States—having abundance of timber, say 300 acres, within the farm —extensive water power passing through it, and easily appropriated for mills, &c., and at small outlay. Several branches of the main creek wind over the place, which, with *eight* never failing springs of pure water, furnish all desirable water for any quantity of stock. The farm is elevated, and drains perfectly, yet so gradual are the rollings and slopes, the soil does not wash away—nor is there an acre lost for culture, except where the streams pass. There are over 2000 acres combined, and excepting the timbered spot, is all cleared, and without obstacle to the plow. The farm has been cultivated since 1843, and numerous and various stock kept thereon—giving very liberal profits. Sheep, for example, and there are about 1500 of *best* blood, yield a *net* gain, *per head*, of over $1½ average; other animals in proportion. The arrangements and capabilities are such, that 8000 sheep may be well provided for—also 50 brood mares, 400 head cattle, and hogs to slaughter 1000 per annum—all of which stock yield liberal profits, at least 25 to 40 per cent per annum, net! The place is just by the beautiful Rock River, and the great *Central Rail Road* runs along the margin of the farm, within half a mile, and at one point touches my boundary. A Depot will be placed within one mile of it. There are over 3000 fruit trees on the place, mostly apple, selected by Downing—a part in bearing, and all will come in by 1854. Here apples sell readily at $1 to $1½ per bushel; other fruit in proportion. I find my constitution not adequate to carry on all these affairs as is desirable, therefore seek aid of one or more, with means adequate, to take one-quarter to one-third interest in the farm, stock, &c., which I will place at *very low price*. I am about erecting a mill, especially with view to the obtaining bran, shorts, &c., and preparing *corn* and other food, to meet wants of the great number of animals, thus economizing over one-third cost of their food.

I have proved by over eight years experience, that the stock alluded to, sell for more than *double their cost of raising*, every charge included—thus a horse, from colt to four years of age, costs under $25, and sells readily at $75 to $100. Mules cost under $20, when 4 years, and sell at $80 to $110. Cattle at 4 years cost about $14, and sell at $25 to $35. Pork costs 1½ cents, and 3½ to 5 cents—sale price. Sheep 50 cents, yearlings—and sell for $1½ and $2. Bucks $10 to $20. All these statements I will guarantee correct.

It is desirable, as a village is growing up rapidly just by, that a store should be opened near the Mill. At least $20,000 of various goods suitable, including Implements of Husbandry, Tools, Machines, &c., may be sold the first year, at over 25 per cent profit, taking part pay in grain, for the mill and stock. A Brewery is much wanted, and will yield liberal profits. Barley is abundant, at 35 to 45 cents per bushel.

Further particulars in an advertisement are not necessary, for whoever desires to avail of these extraordinary opportunities, will come and see. The sooner the better, for work is begun on the Central Railroad, and two others, crossing from Lake Michigan to the Mississippi, and within 15 and 25 miles of the Farm. I will provide *three-fifths* or more of the needed funds—and if needs be, increase the Farm to 3000 or more acres. Population, and really of worthy people, doubled last four years—and aided by the railroads, probably will double in two years—for now we can reach New-York in 67 hours, and by 1854 do it in 40 hours.

The country is unusually beautiful, as it is rich in soils—climate delightful, only about *forty-five* gloomy and cloudy days per annum, and as the census returns show, is more salubrious than most of the other states.

Game very abundant—say Grouse, Quail, Partridge, and Deer—so are fish.

For further particulars apply to the Editor of the Cultivator, if by letter, *pre-paid*.

Ogle County, Illinois, near Rock River, March 1, 1852—1t.

Great Sale of Short-horn Cattle in 1852.

THE subscriber, contemplating some important changes and improvements upon his farm, will sell, *without reserve*, his entire herd of thorough bred, and high grade Short-horn cattle, consisting of upwards of ONE HUNDRED head of Cows, Heifers, Bulls, and Bull and Heifer calves.

This valuable herd of cattle has been nearly all bred by the subscriber, on his farm, and under his own eye, with a particular view to their milking quality, which he believes he has been successful in developing to a degree not excelled in any herd of cows in the United States. Ever since the year 1831 he has been engaged in breeding Short-horns, in the belief that no cattle kept by the farmers of this country, were equal to them in all their qualities, as dairy and feeding animals, and this belief has been fully confirmed by seventeen years experience.

Commencing with animals selected from the best thorough bred stocks, then to be found in this country, this herd has been continually added to, and improved by selections from the best imported stock, and their immediate descendants. During the years 1815, '46 and '47, the Short-horn blood of the late celebrated Thomas Bates, of Kirkleavington, England, was resorted to in the use of the imported bull, Duke of Wellington, and of Symmetry, (by Duke of Wellington, out of the imported Bates Cow, Duchess,) belonging to Mr. George Vail, of Troy, N. Y., which bulls were hired of Mr. Vail for three years. The animals of this herd, since grown up, inherit, more or less, of that blood, which is believed by those having opportunity to judge, both in its milking and feeding qualities, to be equal to any other previously imported; and that belief is confirmed by the prices obtained during several years past, for animals descended from that stock.

For the quality of the stock bred by the subscriber, he can, without vanity, refer to the recent Short-horn sales of Messrs. J. F. Sheafe and Lewis G. Morris, in which some of the highest priced animals were immediately descended, or purchased from this herd. The unrivalled cow, "Grace," owned by Messrs. Sherwood and Stevens, and probably the best *fat* cow ever bred in America, described in pages 183 and 184, vol. x., of the American Agriculturist, was bred by the subscriber; and numerous animals in various parts of the United States, the West Indies, and the Canadas, which have sprung from his herd in years past, may be referred to.

In 1850, the imported bull, Duke of Exeter, of the Princess tribe of Short-horns, (for pedigree of which see (10, 152,) vol. ix., of the English Herd Book,) sent out from England for Mr. Sheafe of New-York, by Mr. Stevens, from the distinguished herd of Mr. John Stephenson of Wolviston, England, was purchased and introduced into this herd; and about forty of the cows and heifers are now in calf to him, all of which will he catalogued for the coming sale. In the quality of his flesh, and in the milking excellence of his ancestry, no bull imported in the into the United States can surpass the Duke of Exeter. His own stock, in the hands of several gentlemen in the State of New-York, are confidently referred to as evidence of his value.

The herd now offered for sale for sale will consist of about FIFTY, thorough breds, including cows, heifers, and heifer calves; and probably TEN OR TWELVE young bulls, and bull calves. The remainder, about fifty in number, will comprise young cows—good, proved, milkers—heifers and heifer calves, together with a few superior bull calves, from the best milking cows, of high grade, Shorthorns, with an occasional dash of Devon blood intermixed—the best of useful, family cows.

All the calves, or nearly all, both thorough-bred and grade, will be the get of the Duke of Exeter; and all the cows, and two-year-old heifers will be bulled by him, (if he lives,) previous to the sale; thus will be combined the blood of the Bates, and the Stephenson stocks, comprising as much excellence, both in milk and flesh, as can be found in any animals whatever.

The sale will be made early in the month of August next, at or near Albany, New-York, for the greater convenience of purchasers generally.

Due notice of the day and place of sale will be given in the several Agricultural Journals; and catalogues describing each animal of the herd, will be published in the month of June, preceding.

For further particulars, inquiries may be made by letter, directed to the subscriber, or to A. B. ALLEN & CO., New-York.

March 1. LEWIS F. ALLEN, Black Rock, N. Y.

PERUVIAN GUANO

AND other Fertilizers. Several hundred tons of first quality of Peruvian Guano, constantly on hand for sale.

Also, BONE DUST, PLASTER OF PARIS and POUDRETTE.

A. B. ALLEN & CO., 189 and 191,
Water-st., New-York.

Jan. 1—tf.

Warren's Improved Portable Horse Powers and Threshers.

THE undersigned continue to manufacture and sell these celebrated machines, and experience has proved that the FOUR HORSE POWER MACHINES have given universal satisfaction without a single exception.

The four horse power may be used with one to four horses—and experience up to this time has proved that there are no Horse Powers and Threshers so cheap to the purchaser as these.

Price of Four Horse Power alone,.	$75 00
" of " " Spike Thresher,..........	30 00
" of 40 foot Band 3½ inches wide,.........	5 00
Terms Cash.	$110 00

P. S.—Orders for any kind of Agricultural Implements and other merchandize, will also be promptly attended to.

EDW. PLANT, } PLANT, BROTHERS, Com. Merchants,
JAS. PLANT, } Feb 1—2t. 146 William st., New-York.

Balsam Fir, Arbor Vitæ, and other Forest Trees.

HENRY LITTLE & CO., of BANGOR, Maine, will furnish any number of Evergreen and other Forest Trees, taken up with *earth on the roots*, with the greatest care, and sent to any part of the United States by Steamers or Railroad—and carefully packed in large boxes, at short notice, at the following prices, viz:

From 6 inches to 1 foot, at 1 cent, or $10,00 per 1000.
From 1 foot to 2 feet, at 1½ cents, or $15.00 per 1000.

The above prices refer more particularly to Balsam Fir and Arbor Vitæ Trees.

We charge what the boxes cost, but nothing for packing.

For two years past, the trees we have procured and sent to a distance, have lived generally, and have given good satisfaction. Evergreens will not live unless taken up with great care.

Bangor, Jan. 1, 1852—4t.

New Staminate Strawberry.

WALKER'S SEEDLING.

THIS new variety of the Strawberry is for sale and will be sent out, to applicants in the spring of 1852, price one dollar per dozen. Orders may be addressed to Samuel Walker, Roxbury, or to Mr. Azell Bowditch, at the Massachusetts Horticultural Seed Store, School Street, Boston.

The Fruit Committee of the Massachusetts Horticultural Society, report of the variety as follows:—"WALKER'S SEEDLING;" this strawberry has now been fruited three years; it is a dark colored berry, of good size, a very abundant bearer, of high flavor, very fine quality, and it will be, it is believed an acquisition. It is a staminate, worthy, as the committee think, of an extended cultivation. *Boston, June 28th*, 1851.

Fruit, Ornamental and Evergreen trees, shrubs, &c., for sale at the nurseries of SAMUEL WALKER,
Feb. 1—3t. Roxbury, Mass.

SYRACUSE NURSERIES,

Thorp, Smith, Hanchet & Co., Proprietors, Syracuse, N. Y.

AMONG the Fruit and Ornamental Trees, Shrubs, Vines, Roses, Bulbous Roots, Greenhouse Plants, &c., cultivated and for sale at this establishment, may be found, in quantity and quality, not surpassed in this country,

Standard and Dwarf Apple Trees.
Standard and Dwarf Pear Trees.
Standard and Dwarf Cherry Trees.
Standard and Dwarf Peach Trees.

PLUMS, QUINCES, APRICOTS, and NECTARINES; all the best sorts of *Currants, Raspberries, Strawberries and Gooseberries;* EVERGREEN TREES, including Deodar, Lebanon, and Japan Cedars, at much less than the usual rates; Junipers, Sprucees, Taxodiums, &c. PÆONIES, a splendid collection of Tree and Herbaceous. DAHLIAS, 150 selected sorts, embracing the best English and American, 25 to 50 cents for whole roots. PHLOXES, over 50 of the choicest kinds. ROSES, 6,000 plants of the finest varieties, with all the new acquisitions. BULBOUS ROOTS, received last fall from Holland, consisting of Double Tulips, Hyacinths, Lilies, Crocuses, &c. BEDDING OUT PLANTS of every description. BUCKTHORN two and three years old, very stout; all for sale, at wholesale or retail, as low as at any other establishment in America.

A new edition of our General Catalogue is now published, embracing, 1st. A full Descriptive Catalogue of Fruits. 2d. A Special Catalogue of Dahlias, Border Plants, &c., and 3d. An extensive Catalogue of Hothouse and Greenhouse Plants, Bedding out Plants, and Bulbous Roots; to which we refer for description and prices.

☞ As the postage on this Catalogue for 500 miles and under, is 4 cents; from 500 to 1500, 8 cents; from 1500 to 2500, 12 cents, &c., which we are compellod to prepay, we must require all applicants, besides paying their postage, to enclose *one letter stamp* for any distance under 500 miles, and *three* for any distance exceeding it.

Syracuse, Feb. 1, 1852—2t.

Kinderhook Nursery and Garden,

At Kinderhook, Columbia co., New-York.

THE proprietor has on hand his usual large supply of Fruit and Ornamental Trees, Evergreens, Flowering Shrubs, Gooseberry and Currant bushes, Grapevines, Hedge plants, Raspberries, Strawberries, &c.

The Trees are of large size, thrifty growth, and well rooted, and can furnish nearly all the new varieties ordered, and will sell at the owest market prices.

Ornamental trees being grown extensively, can be furnished by the hundred at very reasonable rates. European Linden, Mountain Ash, Scotch Elm, English Elms, English Sycamore, Weeping Willow, with a good collection of Roses, Green-house plants, &c., all which can be supplied in quantities to suit purchasers. Catalogues will be forwarded to all applicants. H. SNYDER,
Feb. 1—2t. Nurseryman, Kinderhook.

French Quince Cuttings.

I CAN furnish from ten to fifteen thousand thrifty cuttings from imported quinces, at $2 per 1,000, at Walworth Nurseries.

Walworth, N. Y., Feb. 1, 1852—2t.* T. G. YEOMANS.

A Book for Wives and Daughters.

THE LADIES GUIDE; OR SKILLFUL HOUSEWIFE, (*price twenty-five cents,*) being a Complete Guide to Domestic Cookery, Taste, Comfort and *Economy;* embracing *six hundred and fifty-nine* Receipts, pertaining to household duties, Gardening, Flowers, Birds, Plants, &c. Published by C. M. SAXTON,
an. 1—3t. 152 Fulton Street, New-York.

FARM SCHOOL.

THE Mount Airy Agricultural Institute, located at Germantown, Pa., will open for the summer term on the first Thursday of April next. For particulars address the Principal,

JNO. WILKINSON,
Jan. 1, 1852—3t. Germantown, Pa.

Fruit and Ornamental Trees.

ELLWANGER & BARRY beg to remind those who intend to plant next spring, that their stock of

Standard Fruit Trees for orchards,
Dwarf Fruit Trees for gardens,
Ornamental Trees for Streets, Parks, Gardens and Pleasure Grounds; *Roses*, &c., &c., is very large, and offers great inducements to those who want first rate articles.

The *Descriptive Catalogue*, sent gratis to all who apply post-paid, and remit stamps for postage, which must now be prepaid. Five cents 500 miles or less, ten cents over 500 and below 1000.

☞ See other advertisement.

Feb. 1, 1852—2t. Mount Hope Nurseries, Rochester, N. Y

United States Agricultural Warehouse and Seed Storo.

THE subscribers solicit the attention of the public to the large and varied assortment of Agricultural and Horticultural Implements, Field, and Garden Seeds, which they have constantly on hand, and offer for sale at the lowest prices, and on the best terms. Persons in want of any articles in their line, would do well to call upon them before purchasing elsewhere. A descriptive Catalogue will be sent gratis upon application, post-paid.

N. B. Guano, Bone Dust, and other fertilizers.

JOHN MAYHER & CO.
Dec. 1—tf. No. 197 Water-St., New-York.

New and Fine Shrubs and Plants.

ELLWANGER & BARRY, Proprietors of the Monnt Hope Nurseries, Rochester, N. Y., solicit the attention of those interested in Ornamental Plants, to their large stock of rare and beautiful Shrubs and Plants, among which are the following

HARDY SHRUBS.

Deutzia Scabra, or Garland Deutzia, a fine white flowering shrub.

Forsythia Viridissima.

Ribes Gordoni—Gordon's Currant—yellow and crimson; very fine.

Spiræa prunifolia, flore pleno. Small double white flowers in great profusion; fine dense habit.

Spiræa lanceolata, or Reevesi, one of the finest of the genus.

Spiræa Chamædrifolia, Niconderti, Lindleyana, Japonica, and twenty others.

Syringa (Phyladelphus,) *Pubescens, Zepherii, Cordata, Double, Columbiana* and others, all fine.

Lonicera Ledibourii, a fine Californian shrub.

Tamarix, Africana, Germanica, Gallica, and *Libanotica.*

Viburnum Lantanoides, a beautiful shrub.

Wiegela Rosea, the finest hardy shrub lately introduced from China. The above excellent things can be furnished in quantities at low prices.

SELECT GREENHOUSE AND BEDDING PLANTS.

Fuchsias.—Our collection is one of the best in America. The most distinct and best varieties yet introduced, and quite rare—such as *Pearl of England, Fair Rosamond, Serratifolia, Serratifolia multiflora, Fulgens corymbiflora. Corymbiflora alba, Magnificent, President, President Porcher, Spectabilis*, &c., are propagated largely.

Verbenas.—A collection of 50 varieties, comprising everything fine introduced to this time.

Heliotropes.—Souvenir de Liege, Corymbosum, and some new varieties just received, to be announced hereafter.

Plumbago Larpentæ.

Cupheas platycentra, Strigulosa and others; the first is one of the finest bedding plants.

Lantanas.—EWING; the fine new Cincinnati variety, rose and straw color. *Mutabilis Major*, and several others.

Bouvardias triphylla, and others.

Abutilons.

Salvias.—Splendens major, Oppositifolia, Azurea and others; superb plants for masses.

Fabiana imbricata.

Hydrangeas.—Hortensis, Japonica, Cordata, &c.

Buddlea Lindleyana.—A fine shrubby plant, with large clusters of purplish lilac flowers in the autumn.

Habrothamnus elegans.—A superb plant, half shrubby, with large clusters of showy crimson flowers; blooms equally well in the open ground in autumn, and in the house in winter.

Petunias.—A large collection, embracing all distinct and good sorts.

Lobelia fulgens insignis—flowers of dazzling brilliancy; new.

Lobelia fulgens alba; new.

Veronica Lindleyana.—A charming autumn flowering plant; long elegant spikes of pale, nearly white blossoms.

Veronica Andersoni.—The finest of all; new.

Tree Violets.—White and purple.

Chrysanthemums.—A fine collection of the novel and beautiful pompone, or dwarf varieties.

Dahlias—A superb collection, including the English and French prize sorts of 1851, all at very low rates.

Cinerarias.—A fine collection of new and beautiful sorts, including *Magnificent, Atilla, David Copperfield, Wellington, Beauty of Newington, &c.. &c.*

All the above articles furnished in large or small quantities, at low rates, and packed so as to go any distance with safety.

Priced Catalogues of Dahlias, &c., &c., ready first of March.

Rochester, Feb. 1—2t.

FARMERS, HORSE BUYERS, BREEDERS, BREAKERS, SMITHS, &c.

BEST WORK ON THE HORSE.

SENT FREE OF EXPENSE BY MAIL.

NOW ready, the Seventh Thousand of "Youatt on the Structure and Diseases of the Horse," with their remedies, brought down to 1846, by W. C. Spooner, M. R. C. V. S., to which is prefixed an account of the breeds in the United States, compiled by H. S. Randall, with 55 illustrations, large 12 mo., 483 pages—price $1.50, and for sale by booksellers generally, throughout the United States.

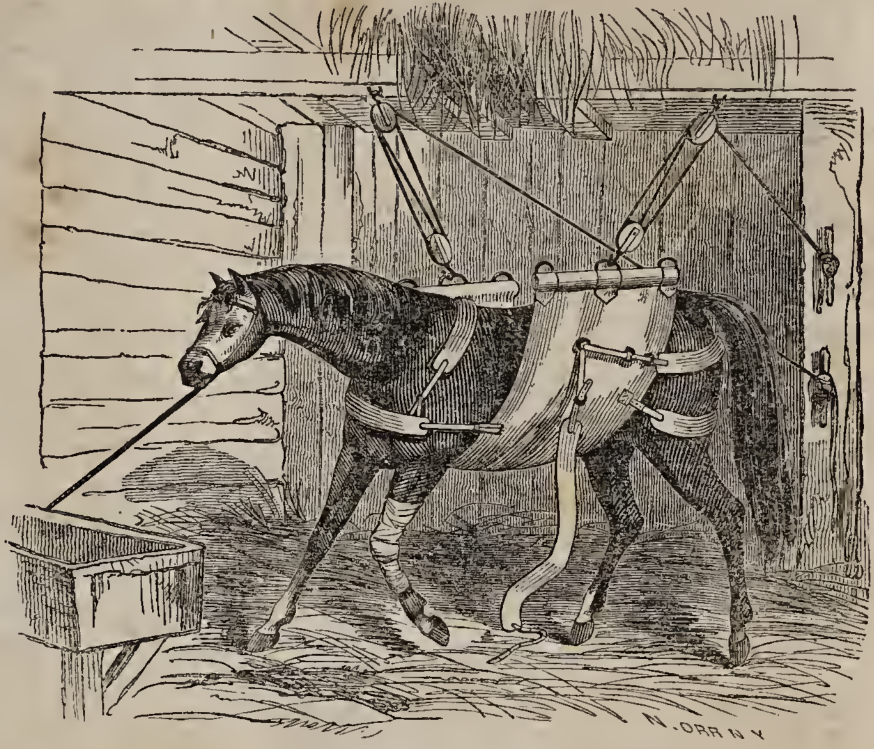
Orders should be addressed to
DERBY & MILLER,
Publishers, Auburn, N. Y.

N. B. On receipt of the price we will forward one copy free of expense to any place in the United States.

"Every man who owns a good horse—the noblest, as well as the most useful of animals, owes it to himself to understand well, matters pertaining to his healthy preservation. Randall's 'Spooner's Youatt,' is the greatest work of the age upon this particular topic."—Am. Courier.

"No less valuable than the animal it describes. Every man who owns or drives a horse, needs this book as much as a horse needs a harness in which to perform his labors, if he would know how to make his beast of the greatest possible service to him."—Boston Farmer.

Jan. 1—3t. j.m.m.



For Sale,

A THOROUGH bred Devon Bull. He has been exhibited a' "*three*" agricultural fairs, and has taken the first premium at each. He is a very superior animal, and will be three years old next month.
THOMAS HANCOCK,
Feb. 1, 1852—3t. Ashton Nurseries, Burlington, New-Jersey.

Devon Bull for Sale.

THE subscribers offer for sale their thorough bred Devon Bull "Uncas," calved the 19th of March, 1851. Sire "Neguntieook," grandsire "Prince Albert," (102 of English Herd book;)—Dam "Non-pareille," by "Lord Lynedock;" grandam a Quarterly cow. "Neguntieook" won the first prize at the American Institute in 1850; and the first at the State show in 1851. "Nonpareille" won the first prize as a three year old heifer at Barnstable, England, in 1846; and the first at the State show in 1851. He may be seen at our place; or further particulars will be given to any one addressing,
W. P. & C. S. WAINWRIGHT,
Feb. 1—2t. Rhinebeck, Dutchess co., New-York.

I. T. GRANT & CO'S

Patent Fan Mills and Grain Cradles.

WE continue to manufacture these Celebrated Mills and Cradles. Our Mills have been awarded seven First Premiums at the New-York State Fairs—three Silver Medals at the great American Institute in New-York—also at the State Fairs of Pennsylvania, Maryland, Michigan and Ohio, and at a large number of County Fairs. They have never been awarded the second premium—always the first, and they stand without a rival. We feel confident in recommending them as the best in market.

Our CRADLES have taken the First Premiums at two New-York State Fairs. We have made valuable improvements on them the last year, for which we have letters patent. They can be taken apart and packed in boxes, and put together again, with very little trouble, by almost any one.

Orders solicited from, and work sent to any part of the United States.
I. T. GRANT & CO.
May 1—e.o.m.—6t. Junction P. O., Rens. Co., N. Y.

Splendid Farm in Ohio for Sale.

WE have a splendid farm for sale, containing about 300 acres. It is situated about 2½ miles west of Columbus, and within 2½ miles of London, the county seat of Madison county. An excellent McAdamized road, from Columbus to Xenia, passes through it. The access to market, either east or south, is easy and quick. The railroad from Cincinnati to Cleveland, has a depot at London, 2½ miles from it.

About 125 acres of the land are cleared, and under good improvement. The balance is well timbered, and the whole is under fence. It is well watered, having springs or streams in abundance.

On it is a substantial brick dwelling house and two other comfortable tenements. The orchard contains about 200 apple, peach, and pear trees. The whole farm is well adapted for raising grain, or corn, and would make an admirable dairy or stock farm.

The proprietor has made arrangements in the west to go into another kind of business, and will sell the above farm on rersonable terms.

For terms apply at this office, or to
WOMBAUGH & WHEELER,
Feb 1—2t. Real Estate Agents, Columbus, O.

Fowls and Eggs.

VERY handsome specimens of the Albany Dorking, Black Poland, and Silver Spangled Poland are for sale by the subscriber. Also, eggs of the above and the following varieties:—

Shanghae, Perly stock.
Santa Ana, game.
Golden Poland.
Java Bantams.

The above may be relied upon as genuine. E. E. PLATT.
Albany, Feb. 1, 1852—2t.

FOWLS AND EGGS.

THE great desire manifested in New-England for procuring good Poultry, has induced H. B. COFFIN, *Newton, Mass.*, to pay particular attention to breeding and importing first rate stock. All persons desirous of having the purest and best to breed from, may depend upon being faithfully served. Among many kinds of Fowls for sale by him, are the following, which he is very particular in breeding.

Shanghae—Forbes stock.
Imperial Chinese—Marsh stock.
Chittagongs.
Royal Cochin China.
Black Shanghae.
Burmah Pootras.
White Shanghais.

Dealers in Fowls or Eggs for hatching, supplied upon liberal terms. Orders addressed to *No. 40 State Street, Boston*, will be promptly executed.

Reference to Mr. J. VAN DUSEN, of Cincinnati, Ohio, who wil take orders for Fowls, as advertised above.

Boston, Aug. 1, 1851—12t.

TO FARMERS.---POUDRETTE.

THE LODI MANUFACTURING COMPANY having enlarged their works, are prepared now to receive and fill orders for Poudrette with dispatch, and in all cases with a *freshly manufactured article*, at their usual prices, $1.50 per barrel for any quantity over six barrels. 3 barrels for $5.—$2 for a single barrel, delivered free of cartage on board of vessel or elsewhere, in the city of New-York.

The Company refer to their pamphlet (furnished gratis) for hundreds of certificates as to the efficacy, cheapness, and superiority in all respects of their Poudrette over any other known manure for raising a crop of corn—also to A. J. Downing, Esq., B. M. Watson, Esq., Hon. J. P. Cushing, J. M. Thorburn & Co., and many others as to excellency as a manure for flowers and trees, and the following from Hon. Daniel Webster, Secretary of State:

WASHINGTON, March 19, 1850.

"If I neglect the annual purchase of some af this article, my gardenerer is sure to remind me of it. He thinks it almost indispensable, within his garden fence; but there are uses, outside the garden, for which it is highly valuable, and cheaper, I think, than any other manure at your prices. A principal one, is the enrichment of lawns and pleasure grounds, in grass, where the object is to produce a fresh and vigorous growth in the Spring. Our practice is to apply it, when we go to town in the Autumn, and we have never failed to see its effects in the Spring."

All communications addressed to the "LODI MANUFACTURING COMPANY, 71 Cortlandt street, New-York," will meet with prompt attention. Jan. 1, 1852—6t.

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Wood's Renovating Salts, or Bone Manure.

WE are now receiving large quantities of this valuable Manure, put up in barrels, which we will sell at one cent per pound. This article is made from the following ingredients, viz.

Charcoal, Bone dust, Plaster, Potash, Calcined Charcoal, Glauber Salts, Saltpetre, Oil of Vitrol, Salts of Ammonia, Gas Liquor, and Bullock's Blood. LONGETT & GRIFFING,
State Agricultural Warehouse and Seed Store,
March 1—2t. No. 25 Cliff street, New-York.

Buckthorn and Osage Orange for Hedges.

TWO and three year plants of the Buckthorn, (the best of all hedge plants at the north,) at $5.00 per 1000 for two year, and $8.00 for three year plants; and one year plants of the Osage Orange, (the best hedge plants for the warmer portions of the northern states,) at $10 per 1000, or $1.50 per 100,—for sale by J. J. THOMAS,
March 1—1t. Macedon, Wayne Co., N. Y.

Union Agricultural Warehouse and Seedstore.

RALPH & Co., No. 23 Fulton Street, New-York, near Fulton Market,

DEALERS in all the most approved Agricultural and Horticultural Implements, Imported and American Field and Garden Seeds, Ornamental Shade and Fruit Trees, Guano, Bone Dust, Poudrette, &c. Wrought Iron Plows, Trucks, Barrows, &c., &c., always on hand. Also the Excelsior, or California Plow.
New-York, March 1, 1852—3t.

Seed Corn.

PURE Dutton Seed Corn for sale, at $1 per bushel.
B. B. KIRTLAND, Greenbush,
March 1, 1852—2t. opposite Albany.

Albany Tile Works.

Corner Patroon and Knox Streets, Albany.

THE subscriber will furnish to Agriculturists, of the most approved patterns, Drain Tile suitable for land drainage, of a superior quality, over one foot in length, 3 to 4½ inches calibre, from $12 to $18 per 1000 pieces. They are formed to admit the water at every joint, draining land from 12 to 20 feet each side of the drain, being the cheapest and most durable article used.

Tile sufficiently large for drains around dwellings, at $4 and $8 per 100 pieces, being cheaper and more durable than brick drains.

The great importance of thorough drainage is daily becoming more apparent. Orders from a distance will receive prompt attention.
March 1—6t A. S. BABCOCK, Albany.

Ayrshire Bulls for Sale.

THE thorough bred Ayrshire Bulls "General Taylor," and "Young Prince,"—the former is three years old, and the latter two years old next April. Both of them were sired by the Massachusett's Society's Imported Bull "Prince Albert," and are out of the fine full blooded Cows "Diana," and Primrose. They are in color dark brown—perfectly sound and docile, and are in all respects as desirable animals for breeders of dairy stock, as can be found in the country. For terms apply to SAMUEL HENSHAW.
Boston, March 1. 1852—3t.

Apple Seedlings for Sale,

TWO feet and upwards, fit for root grafting, $5 per thousand. From 1 to 2 feet, $4 per thousand. Under 1 foot, $3 per thousand—well packed, and delivered in New-York at the above prices, free of expense on all orders amounting to $10 or more, accompanied by the cash. A discount from the above prices will be made on large orders.
PHILETUS PHILLIPS.
Middletown Point, Monmouth, Co., N. J., March 1—1t.*

To Fruit Growers.

PERSONS wishing to procure extra sized Fruit Trees, or Trees in a bearing state, are respectfully invited to visit the Nurseries and make a selection.

60,000 Fruit and Ornamental Trees.

The subscriber offers for sale his Entire Stock of Fruit and Ornamental Trees, Evergreen Shrubs, &c., in his various Nurseries in *Roxbury* and *Dorchester.* The collection embraces most of the varieties of the *Pear*, *Apple*, *Cherry*, *Plum*, *Peach*, and other Fruits that are *worthy* of cultivation. Also *Quinces*, *Gooseberries*, *Currants*, *Raspberries*, *Strawberries*, *&c.*

Extra sized *Pear Trees*, in a bearing state, can be supplied at reduced prices.

20,000 *Buckthorns*, Rose Trees, Honeysuckles, Hawthorns, &c.

Scions, in large and small quantities, from fruit bearing Trees.

The whole for sale at the lowest market price.
SAMUEL WALKER,
March 1—2t. Eustis Street, Roxbury.

⁂ 3,500 Imported Fruit Trees for sale.

☞ Walker's Seedling Staminate Strawberry—price $1 per dozen.

GENEVA NURSERY,

On Castle Street, Geneva, New-York.

W. T. & E. SMITH, Proprietors,

INVITE the attention of Fruit Growers, and Planters of Trees generally, to their large stock of well grown Trees, grafted and budded by the proprietors themselves, with great care. Greater inducements are offered here than at any other Nursery. Our stock of trees consists of the following kinds:

40,000 Apple Trees, well grown, with fine heads.
10,000 Pear, the best sorts.
30,000 Peach, the best sorts, one and 2 years old.
12,000 Cherry, fine trees.
1,000 Plum.
2,000 Isabella Grapes, one and 2 years old.

Dwarf Pears, Dwarf Apples, Quinces, Apricots, Nectarines, Almonds, Raspberries, Strawberries, Gooseberries, Currants, Pie Plant, Asparagus Roots, Dahlias, &c. Ornamental Trees, Buckthorn, English Hawthorn. Scions, Seedling Stocks for Nurserymen, &c., &c.
March 1—2t. W. T. & E. SMITH.

Field and Garden Seeds,

GROWN expressly for our sales, suitable for any climate in the United States. A large assortment may be found at
LONGETT & GRIFFING'S.
March 1—2t. No. 25 Cliff street, New-York.

SUBSOIL PLOWS.

THE subscribers offer for sale an improved Subsoil Plow made under the advisement of Prof. J. J. Mapes, and free from the objections urged against those formerly in use.

The wearing parts are so arranged that they may be easily and cheaply renewed, while the amount of force requisite to move them is less than half that required by those previously made. Price $8.50 and $9. For sale by LONGETT & GRIFFING,
March 1—2t. No. 25 Cliff street, New-York.

Improved Stock.

CATTLE, of the Durham, Devon, Hereford, Alderney, and Ayrshire breeds.

SHEEP, of the Native and French Merino, Saxony, South-Down, and Cotswold.

PIGS of the Lincoln, Suffolk, and Berkshire breeds.

From our long experience as breeders and dealers in the above kinds of stock, and our excellent situation for purchasing and shipping, we think we can do as good justice to orders, as any other house in the United States. A. B. ALLEN & CO.,
Jan. 1, 1852—tf. 189 and 191 Water st., New-York.

Field and Garden Seeds.

WE have recently imported, from England, France, and Germany, and have grown in the United States expressly for us, a fine assortment of the best and most approved kinds of FIELD and GARDEN SEEDS.

Agricultural and Horticultural Implements, a large assortment of the various kinds suitable for North and South America.
A. B. ALLEN & CO.,
Jan. 1, 1852—tf. 189 and 191 Water-st., New-York.

THE CULTIVATOR

Is published on the first of each month, at Albany, N. Y., by

LUTHER TUCKER, PROPRIETOR.

$1 per Ann.—7 Copies for $5—15 for $10.

☞ All subscriptions to commence with the volume, (the Jan. No.,) and to be PAID IN ADVANCE.

ADVERTISEMENTS.—The charge for Advertisements is $1 for 12 lines, for each insertion. No variation made from these terms.

THE CULTIVATOR.

TO IMPROVE THE SOIL AND THE MIND. C F Morton

New Series. ALBANY, APRIL, 1852. Vol. IX.—No. 4.

Inaccuracy in Farming.

We are unwilling to believe the frequent remark that farmers are less intelligent than other classes of the community, or that their business is less perfected than that of many other professions. A great deal of uncertainty and conflicting views exist, it is true, with regard to many points in their practice. But we must not forget that even what are termed, by way of eminence, the learned professions, furnish plenty of examples of similar differences of opinion. The "glorious uncertainty of the law" is proverbial, in spite of the thousands of wise heads which have exerted their shrewdness for centuries to establish uniform justice; for even at the present day the most profound jurist is in some cases at a loss to say whether he may or may not be actually committing a crime against the law; and the greatest giant in legal achievement is he who can creep through the smallest key-hole of technical evasion. If we look at medicine, we shall hardly regard all difficulties settled, when there are almost as many systems for keeping the corporeal machine in repair, as there are changes in Parisian fashions,—while cold water, hot water, steam and red-pepper, alternately exert their powers on the same disease; and cakes of ice and cantharides, mineral poisons and vegetable poisons, mercury and mesmerism, are in the same moment lauded and denounced. Nor shall we, in taking large masses of people together, find more general intelligence among carpenters, tailors, blacksmiths, bricklayers, and butchers, than in the agricultural community. All of them furnish occasional examples of brilliant mental achievement, and many of singular stupidity.

But there is one particular in which the farmers are decidedly in the back ground. It is one in which they have no adequate idea of the immense loss they are sustaining. A thorough reformation in this particular, the country over, would effect as great a change in the art of tillage, as railroads have achieved in the art of travelling, or steam engines in manufactures. The deficiency we here refer to, is the want of rigid accuracy, by weighing and measuring, in conducting the various operations on a farm, and recording the results systematically.

The correction of this evil would immediately do more to improve and render profitable this great art of arts, than all that chemistry, botany, geology, subsoiling, and tile-draining could ever accomplish without it. It would be perfectly astonishing what an amount of fog and cobwebs would be cleared away from agriculture in a few years, if it could be thoroughly and universally applied in practice. We have heard of a certain Yankee ship-captain who kept his "reckoning" upon a shingle; which answered a very good purpose in connexion with some shrewd guessing, until a fellow-countryman on board, in a idle hour thoughtlessly whittled it all away. Yet he possessed a decided advantage over many farmers, who keep no reckoning whatever. They find out perhaps at the end of the year or at the end of the third year at furthest, by the amount of their debts, which way their vessel is drifting, or whether they are making any progress; but what it is that gives the impetus,—whether favorable gales, turned to the best advantage,—or beating against the wind to great disadvantage,—or even rowing with main strength with no wind at all,—they have an exceedingly indefinite knowledge at best.

To come a little more to particulars. There is not one farmer in a hundred but will apply his most skilful mathematics in reaching the precise value of what passes out of his hands—the produce dealer cannot defraud him of a single half-dime. The most accurate balance, and the most correct measure, give the true amount of all he sells. But in all the transactions with his own farm—transactions in which it is of the highest moment that he should know whether he is gainer or loser—everything is enveloped in the darkness of uncertainty. He may not know after years of trial, whether his profits or losses preponderate in the making of pork,—in the fattening of beef,—in the manufacture of cheese,—in the cultivation of grain,—in deep or shallow plowing,—in coarse or fine wool sheep,—in rounded Berkshires, or clipper-built land-pikes,—or in anything else which may be done or managed in two ways. A good farmer informed us that he had found "a decided benefit" in a dressing of leached ashes to his fields; but the measured amount of benefit, or the number of bushels applied per acre, were hid in the mists of conjecture; consequently he was unable to say whether it would pay to draw ashes for manure two miles or ten. Another had used shell-marl under the same circumstances and with a like unknown result. A third had found an increase in his crops from the use of swamp-muck, but whether this increase would repay the expense, double, or quadruple it, remained locked up with the secrets of the unknown.

What should we think of a railroad company that should conduct all their internal arrangements by guesses; which should spend days at the end of each half year in discussing, arguing, and trying to estimate the profits of the road, with a view to declaring a dividend? The balance sheet of a bank or other corporation must not contain an error of a single cent; why should not the farmer know all his accounts with his fields with a faint degree of the same accuracy? The cotton manufacturer can tell to a fraction the cost of his fabric; but how few even among our best agriculturists know how much a certain animal, or a bushel of grain, has cost them; and what seems still more surprising is that after numerous premiums have been offered by agricultural societies, we are still very much in the dark about the comparative value of roots and grain, of ground and unground food, of the best way of raising potatoes, and of a multitude of other points of great importance, and of which weighing and measuring would soon furnish at least a proximate knowledge.

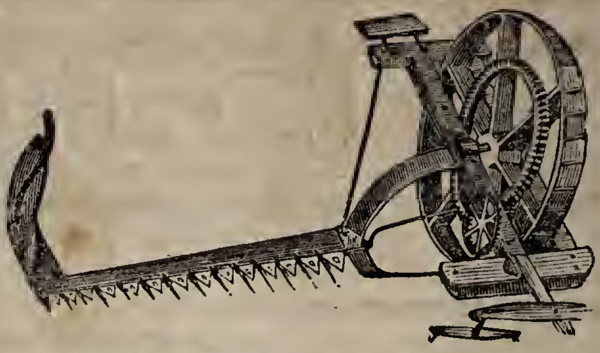
If a single farmer would expend fifty dollars a year in the time and labor required to measure his fields or portions of them; to reckon accurately the amount of manure applied to each portion; to record faithfully the quantity of labor expended; and the number of bushels yielded; if he would try some of the best modes for the feeding and management of cattle, horses, sheep, and swine, in connexion with different breeds or fragments of such breeds, he could scarcely fail to possess in ten years an amount of knowledge not at present enjoyed by one in ten thousand. What then would be the condition of the art, if every intelligent cultivator should adopt a similar course,—what an accumulation of valuable knowledge would be thrown together;—what a clear sun-light would be sent into every dark corner of doubt, and the dim objects of twilight become clear and obvious in full glare of day.

Nearly the whole expense for beginning this proposed improvement is a weighing machine like a hay-scale, in which cattle, loads of hay, &c. may be quickly examined; to which may be added a common grocer's or miller's balance for smaller objects; baskets of accurate measurement, half-bushel measures, gallon and quart measures, a tape-line for measuring land, and cart-bodies and wagon-boxes with accurately estimated contents. Weighing animals once a week during the various experiments in fattening could be quickly accomplished with such convenient scales; and the small platform balance would enable one in a moment to determine the weight of a cow's milk or butter, a fleece of wool, or a bushel of grain. It is the want of facilities of this kind that deters many from accuracy.

If any of our readers wish definite directions how to keep clear and distinct accounts, they will find the outline of an admirable specimen on pages 509, 510, and 511, of the last volume of Colman's European Agriculture, which we earnestly commend to their attention.

◆

Excellent advice.—P. Barry very justly remarks, "Every man who sends an order for a dozen or half a dozen Dahlias, Roses, Fuchsias, Chrysanthemums, or any other genus, should say, "*Send me none but what are really distinct—obviously distinct.* I want not merely slight botanical distinctions, but such as will enable me to have *striking variations and contrasts in growth, foliage, and habit of plant, or in the size, form, and coloring of the flowers*"—a half dozen distinct, well marked sorts, going further than twenty scarcely distinguishable in shade or appearance.



Ketchum's Mowing Machine.

Above we give a cut of this machine, which is manufactured by Messrs. Howard & Co., of Buffalo. From all we hear of it, there appears to be no room for doubt as to its usefulness, or its ability to do all that is claimed for it. We think the proprietors would greatly promote their own interest, as well as that of the public, by making arrangements for its sale in this city. [See advertisement.]

The Economy of Evergreens.

We have long held the opinion that the character and morals of a rural community are necessarily improved by that most interesting of all kinds of rural embellishment, ornamental planting. But for those who cannot appreciate these advantages, we shall present another view of the subject,—the saving in dollars and cents. This the writer has had an opportunity of witnessing the present winter in his own case. Nine years ago, finding a serious inconvenience from the sweep of winter tempests, to which his residence was much exposed, a large portion of evergreens were mingled with the trees and shrubbery, then newly set out. About a dozen white pines, as many American Arborvitæ, and a few balsams, white spruce, Norway firs, and hemlocks, were placed, so far as practicable, on those sides of the house the most exposed, regard being had at the same time to the exclusion of uninteresting points of view.

One rule was adopted in removing the young evergreens, which were chiefly procured from the borders of woods, and which in some instances were brought twenty miles. This was, to take up enough earth on the roots, to preserve the tree upright against strong winds, after setting out. By this means, not one, out of some thirty or forty, was lost by removal. A white pine, then about three feet high and an inch in diameter, is now eighteen feet high, and six inches in diameter, and several others have made nearly an equal growth.

Now, for the *economy* of this plantation, which some of the neighbors thought was entirely useless labor. It has saved, the present winter, by the protection it affords against storms and wind, at least *ten dollars* in fire-wood, and this amount saved is increasing every year as the trees advance in growth. The cost of procuring and setting out the evergreens, is about *three dollars.* What farmer, who goes only for "utility," can show as large a per centage of profit in wheat raising or making pork? Whose children would be most likely to seek the tavern, grog-shop, and theatre,—those who enjoy a home made attractive and beautiful,—or those whose home is bald, bleak, and repulsive, from a total want of this cheapest and most natural of all means for its embellishment?

Transactions of the N. Y. State Ag. Soc. for 1850.

We intended to have given an earlier notice of this rich collection of agricultural matter, which in interest and value is fully equal, if it does not surpass any of its predecessors. The Agricultural Survey of Seneca County, by J. Delafield, President of the Society, the leading production of the volume, cannot fail to yield much instruction to every reader, for, independently of the distinguished ability with which it is executed, that county, small as it is, furnishes specimens of the most important soils of Western New-York, namely, the gravel ridges of the northern portion, the strong wheat land of the centre, and the thinner soils of the Portage and Chemung formations. The county contains, besides, immense beds of peat and shell marl.

The Prize Essay on Agricultural Dynamics, by J. J. Thomas, is worthy the study of every farmer. The loss of time and force, which the ignorance of a few general principles of the philosophy of mechanics and the failure to observe a few simple every day occurrences, causes the farmer, is an item of no small amount in a yearly balance sheet. It is due to Mr. Thomas, to say that the engraver has made sad havoc with some of the figures illustrating its principles, and by which some portions of it are rendered perfectly unintelligible. We refer more particularly to the figure on page 651, where the *straight road*, instead of running over the top of the hill, is made to pass by its side, rendering the reccommendation of the author to pass round it, perfectly ridiculous. Also, on p. 632, the *beautiful curve* made by capillary attraction between two plates of glass, is represented like the wany edge of a slab; and on p. 702, the reader is presented with the preposterous exhibition of the course of smoke from a chimney directly in the face of a strong wind. For the sake of the reputation of the Society, corrections of these errors should be made in the next volume.

Among the lesser papers, the Report on the trial of Plows, the description of the remarkable farm of D. D. T. More, of Watervliet, and of the two excellent farms belonging to Gen. Harmon and E. M. Bradley, the valuable miscellaneous matter in the proceedings of the county societies, and in the numerous communications from various sources, and the analyses furnished by Dr. Salisbury, are particularly interesting and important.

◆

Cheap Draining

It is stated in the foreign correspondence of the Michigan Farmer, that a method of cutting drains has been adopted in Scotland, requiring much less cost than formerly, being all done with the plow. It is very useful in all cases where the ground is clayey and tolerably free from stones. "In the first place, a common plow is passed back and forth, turning a furrow out on each side. Then follows the draining plow, which goes down from two to two and a half feet, the mould-board being so formed as to turn the earth all out. In this manner, twelve acres in the vicinity of Stirling were drained with three plows in one day, the tile being laid in the furrow just as the plow left it. The earth was returned to the ditch by means of a scraper, in the form of the letter V, the legs of course protruding forward, and a team attached to each leg, on each side of the ditch." We have been long since satisfied that the cost of excavating ditches might be much reduced by more horse labor than is generally used. For instance, let a large Michigan subsoil plow with ample team be set in a foot deep, a thing very easily done; by throwing a furrow each way (leaving but a narrow strip in the middle) the first foot of the ditch is at once thrown out with sufficient rapidity to prepare some miles for the spade in each day. By running twice each way, a greater depth and more perfect work might be attained. A regular and thorough system of draining is at present quite expensive, costing some twenty-five or thirty dollars per acre; and if its cost could be reduced one half by the application of horse power, it would greatly contribute towards its general introduction,—and be worth millions to the country, lying as it does, in most cases, at the very foundation of successful farming.

◆

Rural Axioms.

It is as cheap to raise one ton of grass or clover, as a ton of burdocks or pig-weeds.

It costs no more to raise a hundred bushels of Baldwins than a hundred bushels of cider apples; or ten barrels of Virgalieus or Bartletts than the same quantity of choke pears.

An axe costing two dollars, with which a laborer may cut fifty cords a month, is a cheaper tool than an axe costing but one dollar, and with which he can cut only forty cords.

A "cheap-plow" at five dollars, costing in one season three dollars in repairs, and three more in lost time to teams, men, and by retarding crops, is a dearer plow than one at ten dollars requiring no repairs.

A cow bought for ten dollars, whose milk but just pays her keeping, affords less profit than one at thirty dollars, giving double the value of milk afforded by the former.

A common dasher-churn at two dollars, used one hundred times a year, is not so economical a purchase, as a Kendall churn at four dollars, requiring but half the labor to work it.

A ten-acre field, costing fifty dollars per acre, and ditched, manured, and improved at fifty dollars more, so as to give double crops, is much more valuable and profitable than twenty acres unimproved, costing the same money.

The laborer who wastes half his strength in working all day with a dull saw, because he cannot give a shilling or afford half an hour to get it sharpened, will waste at least twenty-five cents per day, or $6 or $7 per month.

The man who loses half an hour of time, worth one shilling,—and wears his wagon and team equal to two shillings more, by going over a long and rough road, to avoid a plank-road toll of sixpence, loses just two and sixpence by the operation. This does not apply to the loaded wagon, where the loss is much greater from the smaller loads.

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State Fairs for 1852.—*New-York* at Utica, Sept. 7, 8, 9, and 10.——*Vermont*, at Rutland, Sept. 1, 2 and 3.——*Pennsylvania*, Oct. 20, 21 and 22, place not decided upon.

ANSWERS TO INQUIRIES.

C. F. Bancroft, of East Calais, Vt., inquires—1. "When is the best time to graft?" Plums and cherries should be grafted very early, before the buds have *begun* to swell, usually before the frost is all out of the ground —apples and pears may be grafted either early or late, provided the inserted scions have not much swollen, but they make a better growth if it is done before the buds of the stock burst.

2. "When is the proper time to transplant wild blackberry and gooseberry bushes—how are they to be treated —and how far apart are they to be set?" They should be transplanted as early in spring as the frost and superabundant moisture are out of the soil, and before the leaves appear—they should be treated with the same care and skill that the best transplanted fruit tree receives— the distance may be three to five feet.

3. "Will apple seeds, kept frozen during the winter, and sown early in spring, grow as well as if sown the fall previous?" Quite as well, if kept in good condition, and sown before sprouting; and if the soil is heavy, they will do better, unless covered after autumn sowing with sand and muck to prevent the formation of a crust.

Lime-stone for Manure.—Wm. C. Hoffman, of Frederick, Md., inquires whether "ground lime-stone will not answer the same purpose as burnt lime-stone." There has been a great deal of theoretical reasoning on the operation of lime, and very few rigidly accurate experiments; but it is obvious to every one that a thin coating of burnt lime applied to the soil, must in a few weeks at furthest receive again its full amount of carbonic acid —but as its efficacy is known to continue for years, it cannot be essential whether it be applied caustic or as a carbonate. Hence ground lime-stone would doubtless answer the same purpose as lime or marl. The only objection is its hardness, rendering difficult the process of grinding.

Breaking Oxen.—A correspondent says, "Say to those about to break oxen, don't tie their tails together; I tried it twice, and in both instances had one of their tales pulled off shortly after yoking them, after which they sustained no further injury, though, as the sailor said, I sometimes found 'the starboard ox on the larboard side,' and the yoke turned. I do not believe in their breaking their necks."

J. H., Harrisburgh, Va. See Emery & Co.'s advertisement in this number, for answer to your inquiry.

Planters.—W. C. S., Farrowsville, Va. We should recommend Bachelder's Planter for corn, on very stony land. The price, we believe, is $14. It may be procured of A. B. Allen & Co., New-York, or of Emery & Co., in this city. We know of no Illinois plow, to be had, either here or in New-York.

Reapers.—D. Z., Youngstown, Pa. You can obtain Hussey's Reaping Machine by addressing O. Hussey, Baltimore, Md., and McCormick's by applying to C. H. McCormick, Chicago, Illinois.

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N. Y. State Ag. Society.—A bill, renewing the act of incorporation of this Society, has passed both branches of the Legislature.

NEW PUBLICATIONS.

North American Sylva.—This work contains accurate descriptions and beautifully colored engravings of the forest trees of the United States, Canada and Nova Scotia. The elegant typography and binding of the volumes, make them an appropriate ornament to the parlor table. Every American must feel a sort of national pride in having always at hand, the dark, rich green foliage of the forests of his own country, and the directions for the cultivation and propagation of our native trees, give the work a positive value. The engravings and descriptions are from the original drawings and notes of Michaux and his son, who spent several years in exploring the forests of this country, in all their length and breadth. Subsequently the work has been prosecuted by the distinguished Nuttall, and may now be considered quite complete. Published by R. P. Smith, of Philadelphia, and G. P. Putnam of New-York, in six volumes. Price $45.

Littell's Living Age.—This periodical has so wide and well-earned a reputation, that nothing new can be said in its praise. It has maintained the same unwavering character amid the fluctuating spirit of the times, and constantly presents a true exponent of the current literature of the day. It contains elaborate articles for the profound, pleasing ones for the casual reader, and instruction every where. Published weekly, at Boston, Mass., by E. Little & Co.

The International.—In the March number we find an account of those wonderful beings, the Aztec children —a beautifully illustrated description of Chatsworth, a moralised legend by the most unique and interesting of American story writers, Nathaniel Hawthorn; with the usual rich and entertaining miscellany.

Harper's.—The March number, opens with a new story by Jacob Abbott, which no one, who has ever read the productions of this attractive author, will fail to be interested in. "The recollections of St. Petersburgh" let us into some of the absurdities and peculiarities of Russian manners and society. "Personal sketches and reminiscences" of living authors, by Miss Mitford, is an interesting article, from a work now in press by Harper & Brothers. A new novel by Chas. Dickens is announced for the April number.

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Analysis of the Sweet Potato.—B. Kirtland gives in the Family Visitor, the following results of his analysis of the sweet potato:

In 119.5 grains of the ashes of the vines, and 104.07 grains of the ashes of the roots, there were,

	Vines.	Roots.
Sand and charcoal,	6.800	2.490
Sand and silica,	4.530	
Phosphate of protoxide of iron,	2.700	1.938
Phosphate of lime,	11.567	11.067
Phosphate of Magnesia,	6.133	4.493
Phosphate of potash,	53.067	16.720
Sulphuric acid,	2.766	1.903
Phosphoric acid,	1.498	8.272
Chlorine,	5.985	3.272
Carbonic acid,	21.091	23.820
	119.137	103.975

Horticultural Items.

Is the Fruit Market Overstocked?—Prof. Mapes says on this subject, in speaking of the better kinds of pears, "many bushels have been sold in the New-York market for $6 per bushel; and in Boston, where the ripening of pears in fruit rooms is better understood, many have been sold at $3 per dozen; nor does the supply as yet tend to reduce the prices." He adds "there are thousands of dollars worth of grapes sold annually by the Broadway fruit stores, at from *one to four dollars per pound*, and the finer kinds of pears at five to 25 cents a piece. Nor can they procure half a supply for the wealthy purchasers of such luxuries." Good fruit merely, may not sell high; but those at the summit of perfection, always. It is to be obtained not merely by procuring the best varieties, but more especially by high culture.

White Fruit and Birds.—The Gardener's Chronicle says that white fruit is not attractive to birds; that the White Tartarian is not subject to their depredations, while the Mayduke and other sorts are freely attacked. The birds in this country appear to be shrewder fellows, as *good* cherries, white or black, all become victims.

Grafting Grape Vines.—Keep the grafts in a cool, shady place, till the stocks you wish to graft begin to grow, and their leaves are as large as a shilling—then graft and you will be successful.

Peach Worm.—Boiling water, says the Horticulturist, is a most excellent application in the spring of the year, for diseased and feeble peach trees, and is a certain remedy for the peach worm. A correspondent very effectually excluded the peach worm, by digging a basin around the foot of the trunk, forming a cavity a foot in width and four inches deep, and then pouring into this basin very thick white-wash, made of fresh lime, and suffered to stand one day before applying.

Pears.—A. Johnson, jr., of Wiscasset, has a young orchard of dwarf standard pears, that is pears on quince, with short bare trunks about a foot and a half high, which is better than if clothed with limbs to the ground, on account of the weight of snow upon them in winter. A tree of the Winkfield, four years set out and nine feet high, bore a bushel, worth at least five dollars.

Apple-tree Borer.—At the Illinois Pomological Convention, last autumn, Dr. Kennicott recommended cutting the borer out the first year, and afterwards plugging them in with camphor, "which kills them to a certainty." C. Bryant thought the red-headed woodpecker a valuable aid in their extirpation, but this the Doctor thought was paying too high wages. The chairman, (J. H. Bryant,) thought there were two distinct varieties, one working in the root and the other the limbs.

The Bark-Louse.—At the same convention, the subject of the *bark-louse* on apple trees being under discussion, J. H. Bryant remarked that he had a tree badly affected, but by giving it rapid growth by cultivation, the bark-louse left. One orchadist had removed them completely by syringing the tree with strong ley, before vegetation started in spring.

Sweet Potatoes for the North.—D. F. Kinney, of Rock Island, in northern Illinois, states in the Prairie Farmer, that he failed in raising sweet potatoes until he procured a variety from Indiana called the Nansemond, an early variety, which he has cultivated for four years with great success. They are yellow, short, and mealy and sweet, and greatly superior in this respect to all the reds. Last year he sprouted sixty bushels of them, but was not able to supply the demand.

To kill Aphides in a Green-House.—The Gardener's Chronicle gives the following:—Take a sheet of touch paper, roll an once of tobacco in it, light it at both ends, put it in the house, leave it there, remain out-side with your hands in your pockets, and the job is done. "In the morning all the green flies will be dead."

Stealing from Gardens.—The author of "Rural Hours," after speaking of some well dressed girls, "elegantly flounced," &c., reaching their hands through the garden fence, and helping themselves to some of the finest and rarest flowers, just as if they had a right to them, asks the very pertinent question, "What would they have thought if some one had stepped up with a pair of scissors, and cut half a yard from the ribbon on their hats, merely because it was pretty, and one had a fancy to it?" Yet the flowers cost more time, labor, and money, and could not be so easily replaced.

Length of Fibrous Roots.—A correspondent of the Gardener's Chronicle examined a plant of mignonette, the roots of which had penetrated through several courses of bricks and descended into a cellar. Over the cellar was a brick pavement, between the joints of which the seed had been sown from year to year.

Beautiful Objects.—At the exhibition of the Cincinnati Horticultural Society, according to Dr. Warder's Review, some beautiful floral objects were presented. One was a Verbena (Defiance) trained up to a single stem 18 inches high, and then branched and drooping off gracefully so as to produce a very pretty effect. Another was a miniature arbor, perfectly covered with living plants, climbers, which being in full bloom, presented a fine appearance—"the rich blue, tender red, and pure white of the varieties of Maurandya, with other species, and the delicate foliage of the cypress vine intermingled, produced a very pretty effect." How incomparably superior are such objects as these, to those artificial monstrosities so commonly seen at exhibitions under the names of "floral designs" and "floral ornaments."

Horticultural Premiums.—The amount of premiums offered by the Massachusetts Horticultural Society, in the various departments, is as follows:—

Prospective prizes (for new variety of fruits, flowers, &c.)....	$750
For gardens, green-houses, &c........................	200
For fruits during the season,.........................	620
For plants, flowers, and designs,.....................	700
For vegetables,.......................................	250

Such an amount, held up to the grasp of skilful culturists, cannot fail to bring out a rich display of interesting objects, and spectators as well as competitors who live within convenient access to such a society's exhibitions, possess privileges which must be very highly prized.

Guano.—It is said that the amount of guano annually used in Great Britain for the last five years, has cost two million pounds sterling, or about ten millions of dollars—more than equal yearly, to the cost of the Erie canal till its first completion. In addition, great quantities of lime, bones, shells, and immense piles of yard manure have been applied to the land

The Princeton Pom. Convention—Western Apples.

An interesting convention of the fruit growers, chiefly of Illinois, was held the past autumn at Princeton in that State, at which some thirty or forty members enrolled their names, among whom we observe a number widely known as skilful cultivators. The proceedings occupy over a dozen columns in the Prairie Farmer.

The discussions were almost wholly confined to Apples; and believing that the results of the deliberations in condensed form will prove interesting, more especially to our western readers, we give below a list of the fruits brought before the convention, and the characters awarded them for that region. The standard of the American Pomological Congress for designating grades of quality as *good*, *very good*, and *best*, was adopted.

Yellow June—good—the earliest, no other particular merit. The May apple of Carolina.

Early Harvest—very good north—but moderate bearer.

Carolina Red June—"very good, probably"—a great bearer every year, very profitable—rather acid, for market and cooking unexcelled—keeps long for an early apple—very handsome—tree ornamental, "finer than a rose-bush."

Early Sweet Bough.—Not recommended, being often very unproductive. On some high land north, has borne well—quality very good.

Sweet June—very good, profitable for general culture—the best early sweet apple of that region. Believed by some to be synonymous with High-top Sweeting of Massachusetts. [Hovey regards the latter the same as the Summer Sweet of Ohio.]

American Summer Pearmain.—"Best"—tree a feeble growth. Very productive, and of excellent quality.

Maiden's Blush—good; popular market fruit—first rate for cooking; recommended for general cultivation.

Hocking (a local name) resembling Rambour Franc, but believed by some to be different, was regarded by some of the members as very fine, productive, and profitable for market—one of the best late summer apples for the west.

Keswick Codlin—early fruit and early bearer, very productive, good for cooking only—worthy of limited cultivation for every man.

Early Pennock—good—very productive, worthy of general cultivation.

Fall Wine—very good—for very general cultivation.

Rambo—very good—best for general cultivation—unanimously recommended.

Vandevere—few if any superior, good bearer, rather subject to blight—worthy of general cultivation.

Yellow Bellflower—very good—some think "best." Highly commended.

Fulton—two members who knew it regarded it as "best."

Swaar—"best."

White Winter Permain—has been supposed the Michael Henry Pippin—but thought by a part of the members to be different—recommended for general cultivation.

Rawles' Janet—very good.

Newtown Pippin—appears from the discussion to be worthless north, fine, south.

Rhode Island Greening—fruit fine, large, fair—a scant bearer—not recommended.

Esopus Spitzenburgh—a few old and productive trees bearing fine crops, known by some members. Tree tender and very liable to blight.

Red Astrachan—very beautiful, rather acid for dessert, excellent for cooking.

Poughkeepsie Russet [English Russet of books]—recommended north for its productiveness; hot weather does not suit it.

Roxbury Russet.—A poor bearer with most members. bears well with others—does not keep in spring.

Baldwin—few had known it to bear well—occasionally affected by bitter rot.

Winesap—well spoken of for productiveness.

The following fruits were placed on the Rejected List by the convention, which so far as they are known is very much in accordance with the opinions of intelligent cultivators in all parts of the country: Early Red Margaret, Carolina Sweet, President, Hoop's Apple, American Pippin, Jersey Black, White Pippin, Big Head, White Apple, Father Abraham, Dutch Codlin, Red and Green Sweet, Watson's Vandevere, King of the Pippins, French Pippin, Cathead, Sanders' June, Shaker's Yellow, Pennock, Pumpkin Sweet, Pound Sweet, Twenty Ounce Pippin, Lane's Redstreak, Capp's Seedling, Surprise, Victuals and Drink, Golden Ball, Clark's Greening, Cheeseboro' Russet, Sweet and Sour, Yard apple, Annette, Male Carle, Red Calville.

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Cost of the Corn Crop in the West.

Eds. Cultivator—In the February number of the Cultivator I see it stated, that the editor of the Prairie Farmer says he has made inquiry of several corn raisers in middle Illinois, of the absolute cost of this grain per bushel in the crib. Their estimate of the cost of raising, harvesting, &c., ranged from *four* to *six* cents per bushel.

To raise corn thus cheaply, the climate must be peculiarly adapted to its growth and maturity; the physical condition and texture of the soil must be such, as to admit of the most easy and cheap cultivation, by the use of the plow, harrow, &c. And the soil must *naturally* contain all those elementary constituents, in an available form, required for a healthy and vigorous growth of the plant.

With all the above named requisites and facilities of growing corn—it is still a mystery to many of our eastern farmers how the *thing* can be done. We have some *patches* of land, light, friable, and free from stumps and rocks, that can be plowed, planted, and cultivated as cheaply as the prairie. By the application of 30 or 40 loads of manure, we can grow from 60 to 80 bushels of corn per acre—now throw out of the account the cost of the manure and cartage, and then our corn would cost us several times the Illinois estimate per bushel. We hope some of the Illinois farmers will be good enough through the columns of the Cultivator, to enlighten us, by giving us the *items* of expense of cultivating an acre of corn, from the time they start the plow till the corn is cribbed. Such facts, might be of much practical use to the hard working farmers of the Granite State.

Warner, N. H., Feb. 13, 1852.

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Vermin on Cattle.—The Maine Farmer says the best way to destroy these, is to reject all the troublesome ointments and washes, and apply tobacco smoke. He suggests a box, with a tube in each end; the burning tobacco being placed in the box, and the nose of a bellows applied to one tube, drives the smoke among the hair of the calf and wool of the sheep. Would not Brown's Fumigator, used for smoking the insects on plants, be a good thing for this purpose? And would not a covering of thin oil-cloth, over the animal's back, serve a good purpose in retaining the smoke? There are probably enough cigars whiffed in one of our large cities in one week, to suffocate all the lice on cattle in the United States.

Remarks on Some of the Farming in the Housatonic Valley.

ANALYTICAL LABORATORY, YALE COLLEGE,
New-Haven, Conn., Feb. 28, 1852.

EDS. CULTIVATOR—In carrying forward at the same time courses of lectures here and in Albany, I have had occasion, at least once a week, for the last two months, to pass through the valley of the Housatonic river for a part of its course. These have been flying railway visits, and moreover the ground has, for the most part, been constantly covered with snow. Such are not the most favorable circumstances for the inspection of an agricultural region, but I have nevertheless been able to note some points which I noticed the more, as they disclose a state of things which is not by any means confined to that section of New England.

Of the country through which runs the Housatonic road in the upper part of its course, I cannot say much; it is in the immediate vicinity of the road, from above Van Deusenville to North Canaan, rather flat, and having, I should judge, a somewhat light soil. Occasionally in this section I noticed fine barns, and outbuildings, with other evidences of thrift and good management. In a few cases too, large heaps of compost appear, sufficient to manure the fields very extensively and heavily. But it is not of this region that I intend to write.

Below Falls Village we come into a very rough and poor district, extending down through Cornwall and Kent, at least as far as New Milford, though I do not feel certain as to the boundaries of the towns. The land in the valleys, back from the stream of the Housatonic, may be better than that near the railway; of this I cannot decide, as I have not visited any points away from the line. Along the line, and in full view from the cars, may be, and I hope are, some good farms; as to this I would not pretend to speak with certainty; but I do feel quite sure that few *worse* specimens of winter management, can be presented, than some of those that I have witnessed this season in the Housatonic valley

In very numerous cases, and as it seems in some of the towns to a passer-by, almost a majority, the cattle of all kinds seem to spend their winter on a bleak exposed hillside, without the least protection; they may possibly be housed at night, or sheltered in some way, but their days they pass in the fields, and there they are fed. Scattered about the fields are small ill-shaped stacks, many times almost flat on the top, and universally without thatch of any kind, so far as can be seen. These stacks are surrounded by crooked rail fences, and the ground for many feet in every direction, is covered with hay trampled into the snow, it being fed upon the bare surface, without racks of any description. Several large circles of this kind may be seen in the same feed, denoting the consumption and the waste of an equal number of stacks.

The stacks are mostly built on sloping ground, quite convenient to some small stream where the cattle can drink, and into which all the soluble portion of the excrements, so plentifully deposited about the stacks, immediately runs. This arrangement in fact, is common to the yards in most cases. They are usually so located that all water and liquid drains away and is lost.

Now, I ask, could there well be devised a more wretched course of winter management than this? In the first place the animals are fed in cold bleak fields, on the snow. Their food is given so that a considerable portion is lost by being trampled under foot, and this food, from the manner in which it has been preserved, is probably not by any means of the very best quality. But this is still not the worst part of the case. It is well ascertained that the most uneconomical way of feeding stock is in the open air, at least so long as cold weather lasts. It has been found by actual and careful comparative experiments, that animals kept sheltered, and warm consumed less food, and really increased more in weight. The explanation is easy. The functions of respiration keep up the heat of the animal body; by the air of every breath we draw, we consume in the lungs and blood vessels, a portion of the food that has been taken into the stomach. Chemically speaking, the carbon of the food unites with the oxygen of the air, producing carbonic acid, which passes off into the atmosphere. It is this union of the carbon with oxygen, that is supposed to keep up the animal heat.

In cold weather we, as all know, require more food, and especially when much exposed to the air. Exercise and cold together very soon affect the system, if an abundance of food is not furnished. A man cannot endure cold and hunger long when they come together, but give him a full meal, and he will soon feel a glow over the whole system, caused by the new supply of what may in this case be termed fuel. The Esquimaux, and other nations living in extremely cold countries, eat eagerly enormous quantities of fat, tallow, and oil, without experiencing evil effects; these articles of food containing much carbon, are doubtless chiefly valuable to keep up their respiration, and through that the heat of the body.

If, after noticing such facts, we look at one of these unfortunate cattle shivering in a wintry blast, we see at once the reason why it eats so much more than if it were warm and sheltered, and at the same time does not increase greatly, or may even decrease in size. The greater part of the carbon in its food, which would otherwise go to the production of fat, is used up in maintaining the heat of its body, and consequently, with a large consumption, it even grows poorer. Surely, lumber is not dear in that part of Connecticut, and even cheap open sheds, fronting towards the south, with racks or boxes for feeding, would be a great improvement, and would, I have no doubt, turn out to be true economy.

In the second place, this arrangement is a miserable one, on account of the loss of manure. During the winter, if the farmers stock are placed in a yard well covered with straw, and peat also, if possible, and properly shaped, he accumulates a large quantity of valuable manure for his next crops. Here, however, the excrements of the animals are scattered about over the snow; when this melts, the greater portion of what is soluble, runs away with it over the frozen ground, while what remains lies, unless the ground is plowed, in lumps, and is comparatively useless. The land about the stacks is of course, somewhat benefitted, but not to nearly the same extent that it might have been, by the same manure properly preserved.

But perhaps some of your readers will say that it is easier to find fault than to amend; that these farmers are poor; that their land is sterile, and thin; that it is full of stones, and only won by the hardest from the rugged hills.

These things are doubtless true, but they do not at all affect the necessity for a vital reform in the system at present pursued. They say—we cannot go to the expenses that are incurred by your rich farmers, amateurs and gentlemen; we know our business better than you can, and we have enough to do to live now, without trying your new fangled experiments, building sheds and barns, and being so mighty particular about a little manure. Such are the remarks that we hear from this class of farmers; they cannot and will not be taught.

Now, I would ask, why in the name of common sense, need these men pursue a system so opposite to their true interests? It is true, that their crops are thin and scanty, but is not that a cogent reason why they should be fed out again in the most economical and careful manner? It is true that their land is poor, and worn out, but is that a reason for letting what would enrich it, flow into the nearest brook? It is true that the man himself, is but just able to make both ends meet, but should he, for that reason, neglect everything calculated to better his condition, and to make his limited means go farther? It seems to me perfectly plain, that if ever man had need to study *true* economy, it is under such circumstances as those which exist in many parts of the Housatonic valley.

The more oppressive and marked their disadvantages, the more ought they to seek how they might best overcome them, and so increase their ability to make further improvements. It is not to be expected that they can do all things at once; can rectify errors and supply all deficiencies immediately; but they can begin and do something by the coming spring, if it is only to prevent the escape of some of the liquid from the barn-yard, or to prepare for forming a barn-yard, where they have none that can be properly so called. If they have no barn, and cannot afford one, they can put up a rough shed; if they cannot afford to hire extra labor, they can do a great deal themselves, at little unemployed intervals of time. All that is needed for the improvement of this valley, or any other like it, is a conviction that improvement is neccesary, and a determination that in some way it shall be accomplished.

I do not think that in these remarks I have done injustice, or exaggerated the condition of many farms to be seen in Cornwall, Kent, New-Milford, &c. Most of those to whom I have especially alluded, do not, I am quite certain, read the Cultivator, or any agricultural paper, and will, therefore, probably never know of my criticism on their system, or rather their utter want of any efficient system; I speak of them, therefore, for the warning of others. Yours respectfully, John P. Norton.

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Carrots for Horses.—Horses that have a hard, dry cough, or that have the heaves, are remarkably relieved by moderate and regular feedings of carrots. A horse of our own, had once caught such a cold, that his cough might be heard half a mile; he was fed on carrots and green clover, kept sufficiently blanketed, never heated, and in six weeks was entirely well.

Dry Roads.

If the 170,000 farmers of the State of New-York, spend on an average but one month annually in driving teams upon the public highways, the yearly cost of teaming in the state amounts in the aggregate, at two dollars per day, to more than eight millions of dollars—equal to the original cost of the great Erie canal. Is not then, the improvement of our public roads, in order to lessen as much as practicable this enormous expense to the farmer, a matter well worthy of his careful attention?

At the present moment we wish to urge the general adoption of a single improvement, which appears to be but little known or appreciated, although where it has been reduced to practice, it has proved of great value. This is *thorough draining*,—not by the usual shallow, open ditches, from six inches to a foot deep, on each side of the road, and so far from the travelled track as to afford it very little relief from the surface water merely. But we mean *a first rate under-drain, directly beneath the track*, which will speedily carry off all the surplus water lodged both on and in the soil; and which, if made right, will be the means of reducing mud and mire to firmness and solidity in a wonderfully short period of time. A large size tile-drain is undoubtedly the best for this purpose; but where the tile cannot be had, quite as good a ditch, but costing a little more labor, may be made by filling in with stones, placing the smaller and flatter at the top, and then covering the whole with a close layer of hard-wood slabs or boards, before the inverted sods are laid on, and the earth filled in. The usual mode of forming a small under-ground channel, by placing a row of stones on each side at the bottom of the ditch, and covering this with broader stones, before filling in with the smaller, must not be forgotten or omitted where much water is likely to be drawn off. And where the bottom is sandy, a layer of flat stones or boards first placed upon the bottom to prevent the sinking of the stones, will save much trouble in future.

If the soil is clayey, or in any way not readily pervious to water, the stones should nearly fill the ditch before the slabs are laid on, even if tile be used, or else the drainage will not be speedy or perfect.

How to Skin a Calf.

My method is as follows, as I do as much of my work as I can myself, and in as short a time as possible: First, I secure the calf, as soon as the finishing stroke is given him, by means of a pin put in at the stalls over the small of his back, and thus keep him to the place till he has done stirring. Then having a horse ready harnessed, I rip the skin with a knife, and after removing the skin a little round the leg, strip it down with the force of my hand, completing it by driving my foot down between the separated skin and leg. Then first removing with the knife the inside corners of the skin, drive it down smartly as before. When the skin is removed in the same manner from the other leg, a small chain is secured to it, and to this the horse is fastened. The legs being then secured by means of another chain, the skin is at once stripped off by the horse. A skin thus taken is free from cuts. E. Vail.

The Science of Agriculture.

The *art* of agriculture is pretty generally well understood in this country; probably, (considering all circumstanstances,) as well as in any other. Our farmers can all do *the work*, and do it well too. But the *science*, the theory of agriculture, is not so well understood. Agricultural science embraces a considerable number of other sciences. Indeed, it is a combination of sciences, for there are very few that do not enter into the practice of the farmer. He may not know it, but it is true, nevertheless. Let us enumerate them. The farmer should be a *chemist*, *mineralogist* and *geologist*, because he practices these sciences every day of his life, whether he knows it or not. He should be a *botanist*, for he practices it very largely; he should be a *physician*, for he has frequent occasions to resort to this science, in both man and beast; he should be an *entomologist*, for no class or profession has as much interest in this branch of knowledge as the farmer; he should be well versed in *natural history*, and he often is, without knowing a syllable of its theoretical principles; he should be an *astronomer*, and this too, he is, quite *too* often, ignorantly; he should be a *political economist*, for in him, at last, the public welfare takes refuge in all its troubles, and from him it derives all its strength—the enlightened farmers constitute the state. If agriculture be a science composed of nearly all other sciences, it is also an art composed of, or comprising nearly all other arts. The farmer ought to be, and frequently is a *blacksmith ;* some of his family are *bakers* and *brewers ;* he is a *carpenter*, a *machinist*, and quite frequently an *engineer*. Now if all this be true, what class of the human family require so general and so thorough an education as the farmer, to make them masters of their profession? It seems to the writer that the world acts most preposterously in bestowing a thorough liberal education upon those who are to practice a single simple science, and withholding it from him who is to practice all the sciences and all the arts. Farmers, themselves, are too apt to take the same course, by educating at a university one of their sons, who is destined to be a doctor or a lawyer, and contenting themselves with giving their other sons and daughters, who are to be farmers and farmer's wives, the simplest of a country school education. They would seem to reason somewhat like this —"Doctoring and lawyering comes from education, and farming by nature," a remark actually made to me by an old and respectable farmer. That even the *art* of farming is incapable of easy and quick acquirement, every farmer knows; but that the science, the theory of farming, as well as the handicraft, should be expected to be obtained more easily, and in less time, than those of the other professions, is, of all human errors, the most unaccountable. It is true, the boy raised upon a farm, and diligently performing the usual labors of a working farmer, will acquire the handicraft of the art by the time he is of lawful age, without the aid of *school* education—he may do so without being able to write his name. But then what sort of a farmer is he? A mere mechanical operator, who is obliged to follow the patterns and examples of his predecessors, being incapable of improving them in form or substance, not knowing anything of the *theory* of their operation, or upon what principles they may be changed for the better. The common blacksmith knows not why he blows the bellows—he only knows he increases the heat of his forge by it, but he knows not why; and so the merely practical farmer knows that by doing certain things he will produce certain results, if the season be propitious, because such things produced such effects in his predecessor's time, but he knows not why! If the blacksmith and the farmer knew all about the *theory* upon which their labors depended for their effects, how much more effectively, and with how much more certainty of results, would they not both labor? I have seen stable manure applied to land already too rich in such materials, and have heard wonder expressed because it did not produce results there equal to those it produced on land where it was wanted. I have seen lime applied to land wherein there was already a superabundance, and have seen it withheld when it was much wanted, all because the operators were unacquainted with the chemistry that properly belongs to their profession. Suppose the dairywoman knew the theory of the operation of churning, the philosophy, if you please, of the separation of the butter from the milk or cream, how many hours of hard labor would such knowledge not save her, and how much more butter would she not obtain from her milk. Even in the *kitchen* of every farm house, yes, every city dwelling house, there are numerous chemical operations constantly going on, which if properly understood, would result greatly to the advantage and comfort of all. The simple preparation of a cup of coffee, will depend for its result upon a chemical operation, and the beverage will be good or bad, according as it shall be prepared in accordance with correct chemical principles. Generally, cooks have made coffee so often under the instruction of others, that they know how to make it properly, but they have not the least idea of the philosophy of the work. The same may be said of all other operations in cooking. But the greater interests, such as making, saving, and applying manures; analyzing soils, selecting and applying renovators, (lime, &c.,) and *mixing soils;* these all require a knowledge of chemistry, theoretical and practical. There are but few farms that have not different qualities of soils, in different places, in excess. Here, a low, "*sour*" bottom; there, an arid sand hill; here, a dead clay, and by the side of that river a wide margin of black vegetable mold. How speedily would the truly scientific farmer commence carrying sand to the clay, and clay and sand to the vegetable mold, and the latter to all the others—and by thus mixing the various soils, render the whole fertile? If he be in doubt whether the soils of his various fields contain the necessary quantity of lime, how easily can he ascertain that fact, and if they do not, apply the proper quantity of this renovator. Possibly his soil is rich enough in vegetable organic matter—and if so, he ascertains the fact, and applies no more of that class of manures, but resorts to chemical renovators. And probably the reverse turns out to be the case—he has found lime and potash enough in the soil, and wants vegetable matter, and he applies it. In fine, a knowledge of chemistry, vegetable physiology, and a modicum of common sense, will enable him to ascertain what articles of manure his various fields require, and thus avoid not only "carrying coals to New Castle," but paying dearly for them too. A general knowledge of chemistry and the kindred sciences, would also put an effectual stop to blindfold and costly experiments. It would also put a stop to universal agricultural panaceas. No body would then think of saying that common salt, soda, lime, anything, was an universal manure. They would then be all good only where and when they were wanted in a soil. But, says everybody, how can all this be done? How can everybody be educated and made scientific? I answer, by introducing scientific education into all the schools. How many a farmer's son is taught French, Latin, Greek, Mathematics, Algebra, and a dozen other subjects, not one of which will ever be a hundredth part as useful to him as chemistry and vegetable physiology would be. Enough of chemistry, and all the collateral sciences, should be, and can be, taught in plain English, in any country school, to make every farmer a truly scientific agriculturist, and it seems to me the legislatures of the states should take the matter in hand. In my opinion, there should be in every county of the state, schools expressly for this object, at which teachers should be prepared to teach these sciences in the common schools. Gideon B. Smith. *Baltimore, Feb.*, 1852.

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The Influence of The Cultivator.

The following extracts, from a letter of a correspondent in Vermont, show in what spirit, and with what purpose a paper should be read:—

There are large numbers who are able, (who is not able to pay 75 cts?) to pay for an Agricultural Paper, and who ought to be better informed on this subject. The reply is frequently made, when asked to subscribe, "I don't think much of farming by rules, and some of those laid down I know wont do for me." No intellgent reader of your paper looks upon it as containing fixed rules that any farmer can follow implicitly with profit. Because a man near Boston can pick $60 worth of tomatoes in a day, a man in this section would be a fool to attempt to imitate him. Other cases equally plain might be mentioned.

Though I value very highly many of the experiments in, and modes of farming, yet it is not on this account alone, that I feel interested in the circulation of the Cultivator. A person who should read nothing in our leading political papers, but their strictly political articles, would read to little profit. These papers have become a kind of circulating family library, of a useful and entertaining character, and he must be an ignoramus, who does not learn from them something of the principles of philosophy, chemistry, geology, law and science, in all its branches. Nearly every week brings news from all parts of the globe, and a citizen of the United States must feel amply paid for a year's subscription each week, as he glances at the changes going on everywhere, and sees with pride, our republican institutions extending their influence, and crushing one despot after another—and our countrymen excelling in every branch of industry and skill.

It is in this light I look upon Agricultural Papers, which are conducted upon scientific principles. I have before observed, that I have not for several years received a single number of The Cultivator, for which I would not have readily paid its price for a single article. What a mighty sum that would be!—about six cents—a sum that would purchase two glasses of whiskey in your state, (it is more in Vermont I believe,) or it might pay two small papers of tobacco, or two segars!

The other day I took one of the back volumes, and read the article of a Southerner, asking what he should do with his seventy slaves, and twelve hundred acres of land. I consider the privilege of reading that article for the fourth time, as worth more than the cost of four numbers. It is candid, and well written, and shows the obstacles which lie in the way of emancipation. The reply of your Kinderhook correspondent is worth a whole volume of the Cultivator; yet neither of these articles are strictly agricultural.

There is your Hinsdale correspondent, who has as many *aliases* as Bristol Bill ever assumed. Why such a writer should resort to such expedients, I cannot conceive, but with all his attempts to conceal his real name, his character is well known, and his articles can easily be traced home. Prof. Norton's articles are more properly scientific than agricultural, while Mr. Holbrook's partake more of the historical and biographical.

I do not know that I can show a single improvement on my farm, but that I can point to a number of the Cultivator and say, "*I got that there.*" But while I have been reading its agricultural matter, my attention has been called to other subjects directly or indirectly connected with it, that have been of more value to me than the cost of twenty volumes of the paper. Yours truly, John S. Pettibone. *Manchester, Vt., Jan.* 1852.

We consider these remarks as remarkably just and appropriate. It is a striking feature of all true knowledge, that it is suggestive. One fact leads to inquiry, one truth reveals another, and a single idea conceived by a vigorous sound mind, paves the way for a series of discoveries almost astounding in their results. Thus it is, that improvement in any branch of industry, invariably leads to improvement in kindred branches, showing that the progressive tendency of the age is toward a higher standard. Though a man is usually estimated by his success in his own business, and a paper by the rank it holds among others of the same class, it would be an error to measure the influence of either, strictly by what has been accomplished in a particular sphere. Manly effort put forth in any one direction, tells on the elevation of the whole human race; and when, now and then, we hear the echoes of a long since uttered voice, coming back from the green hills of Vermont, we feel a sense of gratulation which spurs on to renewed exertion. Eds.

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Mammoth Steers.—The Granite Farmer says that the mammoth steers lately exhibited at Haymarket Square, Boston, weigh about 4,000. pounds each, and that the proprietor has been offered $15 per hundred for them for beef, which would be twelve hundred dollars for the pair. Dr. Crosby says, "While standing by one of them, our eyes came up to within four inches of the top of the shoulder, and to see upon his back we were obliged to mount a box." If the Doctor had given his own height, we should be able to judge of the height of the ox.

Notes of a Tour in France.

Eds. Cultivator—In accordance with your wish for some few agricultural notes of my last summer's tour in France, I send you the following desultory "jottings down," from my journal. They will be of interest, perhaps, to some of your readers, whose curiosity may have been excited regarding the country of the "French Merino" sheep—a breed that, within a few years, has occupied the attention of many of our flock-masters, and whose steadily increasing popularity, bids fair to give them a prominent place in the sheep husbandry of our country. My rambles this summer, were almost entirely confined to the department of the "Seine et Oire," (where the finest flocks of this breed are found,) my especial object in visiting France, being to select and send to this country the best sheep of that variety. Of my success, I leave others to judge; though without the cordial assistance and advice of one of the best breeders in France, I should scarcely have succeeded in meeting the approval of the critical judge in this country, for whom I acted.

On the — day of last April, I left the Havre and Paris railway at Poissy, and bidding good-bye to my traveling companions, who marveled much at my stopping when within an hour of the gay city of Paris, I entered a Cabaret, or small inn, to refresh the inner man before going further, and to procure a conveyance to Wideville, my destination for the night. Mine host, a round-faced portly individual, in white apron and cotton night-cap, (for he was cook as well as landlord,) received me as if I had been an old customer, and promising me horse, dinner, lodging, anything or everything I wanted, bustled off to his pots and pans with comic gravity. By the time the stout Norman stallion that was to take me on, had eaten his feed of oats, the dinner was placed on one of the numerous little tables that, covered with a coarse but snow-white cloth, always stand ready in the large "Salle a Manger," or eating-room. With the appetite of a man just from ship-board, I did ample justice to my stout host's cookery, and had just finished the bottle of light red wine, the invariable accompaniment of a French meal, when the cabriolet came to the door. This vehicle is the universal one-horse conveyance in the country, and resembles our old fashioned chaise. It is roomy and comfortable, holding three persons. The hood or top projects very far forward, and a wooden apron shutting up the front makes it almost close in bad weather. It is suspended on steel springs and is very heavy, though the large wheels diminish the draught; the rough pavements require a strong carriage, but the horses being all very powerful, its weight is of little consequence. Still our carriage makers would rather laugh at its ponderous appearance, and compared with our light wagons it would look very like a dray-horse by the side of a thorough-bred.

Leaving Poissy, we soon cleared the narrow crooked streets of the town, and once in the country, the sturdy black, incited by sundry applications of the whip, increased his pace, and striking into a good round ten mile an hour trot, kept it without flagging, up hill and down, all the way to Wideville about four leagues. These horses, though often rather sluggish, possess great wind and bottom. I had frequent occasion to remark this in those taken directly from the plow; after a hard day's work perhaps, they would go ten, twenty, or even thirty miles, without sign of fatigue. The general character and appearance of the Norman horse is too well known to need any particular description. Strength and endurance are their distinguishing features, to which, surprising as it may seem, is generally joined docility. My friend's wife Mad. G——, drove either of his two cabriolet horses with perfect safety. They often reach a great age, and retain all their good qualities to the last. I have seen twenty year old horses working as cheerfully as colts. The farmers generally use stallions in their teams, the mares being chiefly kept by the breeders. There are several horse fairs in this part of France; one of the most considerable is at Chartres; it is held once a year, and there are sometimes a thousand horses on the ground for sale. The most esteemed variety is the "Percheron," so named from the locality where they are bred. At three or four years old they sell for from one to two hundred dollars, and even higher, according to size and action, and are much sought after by the richer farmers and proprietors as cabriolet horses. A young grey of this breed in the stable of a friend with whom I stayed, at St. Escoville, struck me as a noble specimen. He stood 16 hands high and well spread. His powerful counter, short back, strong loin and bony limbs denoted great strength and constitution, and his broad forehead and intelligent eye, spoke well for his temper and sagacity. Nor was I deceived, when the next morning, being late in starting for the rail, he took two of us in the heavy cabriolet over a hilly wood to Estampes, a distance of 14 miles, in less than an hour, without effort or fatigue, though apparently his condition was much too high for such a drive. They are generally good feeders and easily kept fat. I think that a cross of this breed on our common stock, might improve the size and substance without injuring the activity and spirit that characterises the American horse. For our use it would be far more valuable than a cross with the English dray horse, whose only recommendation is his prodigious power, his best pace being a walk. The Canadian horse still bears a resemblance to the parent stock, though with less size and style, as would of course follow from crossing with the small Indian race. The "*Morgan*" horse has been said to have a strain of this French blood, and their appearance and performance would certainly warrant the opinion. If such be the case, no better argument for the cross could be found.

Our road now lay through a rolling, cultivated country, dotted with small hamlets, and patches of wood. The forests of St. Germain and Marly bounded the view to the east, but westward, the eye ranged far over the fertile valley of the Seine. These forests were once much more extensive, and belonged to the Crown, by whom they were carefully preserved for the purposes of the chase. But during the various revolutions that have shaken France, they have been on various pretexts reduced in size and number. The land has been cleared, and let or sold. The high walls that enclosed them have been suffered to fall into decay, and sheep and cattle quietly graze, where once the stag and the wild boar were the only occupants. Some of the best farms in this part of the country, are on the sites of these old forests. They are traversed in all directions by roads and paths, constructed in olden times for the convenience of the king and court when hunting, but now overgrown and neglected, they are only used by the wood-cutter or charcoal-burner.

The first thing in a French landscape, that strikes an American, is the absence of fences, or visible divisions of any kind; and yet the land is often held in small parcels. The usual mark is a stone set in the ground at a corner; often it is little more than laid on the surface; nevertheless, quarrels and litigation arising out of *boundary* questions, are very rare. The sub-division of land is most general near the villages, and in their neighborhood the pieces are often very small. It is the custom, when a man dies and leaves land, (no matter how little it may be,) for his heirs to divide it, and each one hold his portion. On the death of one of these it is again divided, and so on until accident or necessity, throws it into the hands of some large land-holder. There seems to be but two classes of proprietors in this part of France. The one holding large estates, the other mere patches of ground There are few *small* farms either owned or rented. Most of the land is rented in bodies of from five hundred to a thousand acres. The rate depends of course upon the quality, &c., varying from five to ten dollars an acre. The large tenant farmers reside on their farms; but the peasantry, or working classes, live in hamlets or villages, as is the case in most parts of Europe. Hence it is, that around them the land is so divided. The small lots are usually in the shape of long parallellograms, and with their various colored crops, look at a distance, like a huge patch-work carpet. The women do most of the labor on these little patches, whilst the men are occupied with other work. The cultivation is generally rude; the people are ignorant and wedded to old customs, and the land cropped to death! Spade husbandry is the most common, and I was told the crops were very light, probably for want of manure. The poor people try to remedy this want by turning under a green crop, and sometimes with success.

The roads are excellent, and are kept in order by government. They are divided into sections of a few miles, to each of which a man is appointed, whose sole duty it is to repair the road. There are two kinds of road in France. The old road, with a strip of pavement about five yards wide through the middle, and a good gravel track on one or both sides. This was the ancient post route, and the principal thoroughfares were constructed in this way. When new, it is excellent, but the blocks of stone are large, and soon become uneven, when it is very uncomfortable to travel over. The new roads are MacAdamized, and are equalled by none I have ever seen.

In this department, as well as in many other parts of France, they are bordered with fruit trees, generally apples and pears. The latter were in full bloom, and promised an abundant crop of fruit. It is, however, very poor, being only fit to make cider or perry. "Cider," as *they* call it, is made indiscriminately of both apples and pears, and is the common *drink* of the country, at least of this part, where the vine is not cultivated. Very little attention is paid to making it, as it is only used by the lower classes. The fruit is neither ground nor pressed, only steeped in water; and as might be expected, the beverage is very insipid, and I should say, from its taste, has no intoxicating quantities.

As we drove along, I remarked how very few cattle or sheep were in the fields, and those few always accompanied by a shepherd or cowherd, to keep them from trespassing. The cows are sometimes tethered by a rope round the horns, fastened to a pin driven into the ground, and I observed that they always eat up, without trampling down or wasting, all within their reach; they were usually tethered on clover or lucerne. We passed at a distance, the Agricultural School of Grignon, one of the best government establishments of the sort in France, to which I afterwards paid a visit. Here, leaving the paved road, we turned into a cross road, which soon brought us to the gates of the park, within which, and close to the old Chateau of Wideville, my friend Mr. E. resides. He, himself was, not at home; but I was received with true French hospitality by his family, and at once took up my abode here for several days. F. M. R.

Morris, Feb., 1852.

Mulching Potatoes.

For the purpose of directing attention to the subject in season, and inducing the trial of experiments, we give the substance of a mode of raising potatoes described in the Plough, Loom and Anvil, as performed by three different farmers, by mulching copiously with straw. The land, prepared as usual, was laid off in rows two feet apart, manured in the furrows; the potatoes dropped and covered as usual, leaving a level surface, and straw then applied six inches deep. The straw kept the surface moist and mellow throughout a prolonged drouth, and the crop was 300 bushels per acre, the tubers being of the finest quality, although potatoes were generally nearly destroyed by rot. "What struck us as a peculiarity," says the editor, "was their singular smoothness, being quite as much so as apples. Mr. Somers laid his potato cuttings upon unplowed, unprepared ground, merely covering them with straw, and his crop we are informed, was fully equal to Mr. Skinner's."

A new Mode of Fence Building.

Eds. Cultivator—Being desirous to add my mite for the benefit of my brother farmers, I describe my mode of fence building. In the first place I set a good post seven feet four inches in length, two feet four inches into the ground, leaving five feet above ground. I then drive a stake beside the post at sufficient distance to admit a rail, then lay in two rails. I now twist a wire firmly around the post and stake, then put in two more rails, then another wire, completing the fence with two additional rails, making six in all. I take the precaution to sharpen my posts, as they take their places more readily when thrown by the frost. I have had this fence standing on my farm for four years, and it proves to be cheap and substantial. My neighbors have also tried it and found it in all respects satisfactory. A. Baley. *Burnt Hills, Saratoga, N. Y.*

The Ice Trade.

Editors Cultivator—A view of the methods of cutting and storing ice, in the vicinity of Boston, and of placing it in vessels for exportation to distant ports, is well worth a journey of one hundred miles. I spent a day of the very fine weather of the first week in February, at Fresh Pond, Cambridge, near Boston, observing the processes of the ice business, and learning its statistics and capacity as a branch of commerce. It is a large, and emphatically a *brilliant* business. A substance so perishable, and ordinarily so valueless as ice, becoming an article of profitable exportation to the principal ports in warm climates, often in its voyages twice crossing the Equator; the numbers of men and horses engaged in securing ice, all putting forth their utmost activity; the long trains of the railroads, employed in transporting it to the wharves for shipment; the number and variety of vessels in the harbor receiving or preparing to receive their ice cargoes,—all conspire to impress the reflecting observer with wonder and enthusiasm.

Frederic Tudor, Esq., of Boston, is distinguished as the original projector of the ice trade of the United States. In 1805, at the early age of twenty-two years, Mr. Tudor conceived the idea of making ice an article of commerce, and forthwith commenced arrangements for taking a cargo to the West Indies. His enterprise found little favor with others, and no one being willing to receive so novel a freight on shipboard, he purchased the brig Favorite, of 130 tons, loaded her at Gray's wharf, in Charlestown, with ice cut in Linn, now Saugus, about seven miles distant from the wharf. The Favorite sailed on the 13th of February, 1806, with Mr. Tudor on board, arriving at St. Pierre, Martinique, in twenty days, with her cargo in perfect condition. The experiment resulted in a loss of about $2,700; but Mr. Tudor being naturally inclined to far-reaching views and plans, and to an energy and decision of purpose not to be baffled by the obstacles it met, made other shipments with various success, until the embargo and war of 1812 put an end to his business. After the war closed, in 1815, he negotiated a contract with the government of Cuba, under which a good ice business was pursued at Havana. Shipments were made to other ports in the West Indies, in some cases attended with profit, and in others with loss. In 1817, he extended the trade to Charleston, S. C.; in 1818, to Savannah, Ga.; and to New Orleans in 1820.

The shipments of ice to ports coastwise and in the West Indies, slowly but steadily increased, and in the year 1833, Mr. Tudor succeeded in extending the business to the East Indies, by safely landing a cargo at Calcutta. He afterwards shipped ice to Bombay, Madras, and to various ports in India and China, and fully demonstrated that this perishable article could be made to pass a voyage of five months, through various climates, crossing the equator twice, landing safely at its destined port, and might there be preserved throughout the year.

Up to the year 1832, the ice trade had been mostly conducted by its original projector, the total amount of the shipments that year being something over 4,000 tons of ice, all of which was taken from Fresh Pond. Many perplexities, discouragements, and heavy expenses were experienced in placing the business upon a permanent footing. The implements and machines for cutting and preparing ice for storage and shipment, for hoisting it into the ice-houses, or on board ship, must be invented, and afterwards improved, or thrown aside for such others as increasing experience determined to be better; ice-houses, at home and abroad, must be built, and the mode of construction best calculated to preserve the ice, could be determined only by expensive experiment; the cheapest and best mode of transporting ice from the ponds or ice-houses to the ships, and from them, when arriveda to the destined port, to proper storage again, must be ascertained; the preparation of vessels for receiving and preserving cargoes during long voyages through warm climates, was the subject of many experiments, involving great expense; and added to the rest, the owners of vessels objected to a freight of ice, under an impression that it would injure their vessels, and hazard the safety of voyages. Notwithstanding these discouragements, and the many early disasters to which Mr. Tudor was subjected, he persevered in his operations, has continued in the trade up to the present time, and now, forty-six years after his first voyage to Martinique, is considered one of the rich men of his native town.

The difficulties experienced in the early operations of the ice trade, are now in a good degree overcome; its methods are highly excellent; more ice is now taken in one favorable day than in 1832 would have been necessary to supply the whole trade; many enterprising parties are now engaged in the business; it has more than doubled in importance within the six years last past; and notwithstanding it has now reached a yearly exportation of 100,000 tons, Mr. Tudor and others consider it as yet in infancy, capable of great enlargement. The quantity of ice used in old markets is steadily increasing, and new markets are constantly opening to receive it. Its use in New-Orleans has grown from 300 tons in 1820, to 30,000 tons in 1851,—or to nearly one-third of the whole shipment from Boston. Fresh and Spy Ponds for many years supplied all the ice the trade wanted; but within the past few years, operations have been extended to a dozen or more ponds not far from Boston, and ice houses have been erected on their shores, of a capacity, in the aggregate, for storing a great quantity of ice. Gentlemen engaged in the trade are of opinion that in a few years more, the product of nearly all the waters around Boston will be required, to supply the demand.

The shipments of Ice from Boston, coastwise and to foreign ports, during the year 1851, were as follows:

	Tons.		Tons.
East Indies,	11,508	Trinidad,	265
London,	531	Matanzas,	492
Liverpool,	816	Porto Rico,	1,175
Rio Janeiro,	2,182½	Demarara,	630
Kingston,	1,782	Chagres,	191
St. Thomas,	1,144	Nassau,	300
Gibraltar,	476	Vera Cruz	100
Alexandria, Egypt,	373	Fayal,	11
Marseilles,	115½	San Juan,	15
Cape Town,	350	Provinces,	18
Barbadoes,	702½	Porto Cabello,	35
Pernambuco,	189	San Francisco,	987
Sisal,	350	Southern Ports,	68,361½
St. Vincents,	353		
Havana,	5,520	Total,	99,578
St. Jago,	605		

Ice used in Boston and vicinity, in 1851, about, 30,000

Thus the ice trade has succeeded in converting a rapidly wasting, and ordinarily valueless substance, into a production of large commercial importance, affording a handsome return to the parties engaged in its prosecution. It furnishes inhabitants of countries contiguous to the equator, with a grateful, and now indispensable luxury, both in sickness and health. It has thereby signally and powerfully promoted temperance in the use of strong drinks; for before its extension to those countries, their insipid waters were rarely used as a beverage, strong drinks being a universal substitute; now, iced-water is the most grateful beverage, and is freely used. Day laborers and teamsters with their horses, find employment in cutting and storing ice, at a dull season, when they most need work, from which they annually realise as much as $100,000. Ship owners now derive from the trade at least $200,000 each year. The State of Maine furnishes the saw-dust used in preparing vessels to receive ice, and in packing it, from which her people receive annually $15,000; and she also furnishes lumber for the same purpose, for which they get $15,000. Railroads earn from the transport of ice some $50,000. The traders to India and China get about $35,000. Machinists and blacksmiths receive $2,000 per annum, and the tax-gatherer comes in for his share. Orchardists now transport fruits to India in ice, which they once could not do, and from which they derive 10 to $15,000 each year. Perishable vegetables are sent in great variety to

India on ice, from which a profit is realized. Live animals, for the supply of fresh provisions, are no longer carried to sea in coops and stalls, but dead; they go in ice. It is said that the India trade is greatly enlarged at Boston, and that the ice business has secured the result; that a majority of the vessels bearing India cargoes are sent to Boston, because her ice affords a return freight.

Visiting Fresh Pond, to view the operations of cutting and storing ice, I found that the parties engaged in the trade, had each a given surface, or "privelege," to work upon, accurately laid out by metes and bounds, and described by deeds in writing, and that those boundary lines are exactly observed. I was first introduced to Mr. Tudor, from whom I derived much information, and various statistics relative to the business. I next met N. J. Wyeth, Esq., and had the pleasure of some conversation with him; but finding him much occupied, and that he had already been actively engaged four successive days and nights in securing his crop of ice, without sleep during the time, I did not choose to tax him further. Mr. Wyeth has distinguished himself by the use of steam power in elevating ice from the pond to the receiving doors of his ice-houses, and in dressing the blocks of ice to accurate shape and dimensions, for packing. He has also constructed massive ice-houses of brick, the walls of which are four feet thick from outside to inside, inclosing two sets of air spaces. They are costly, but have the advantage of durability. Mr. Wyeth has been a distinguished adventurer, has twice crossed the Rocky Mountains to Oregon, made investments there, is evidently a man of varied knowledge and superior abilities, and great energy of purpose.

Passing on, to the works of Messrs. Gage, Hittinger & Co., I found Mr. Hittinger very polite, and ready to show me everything, He had filled all his ice-houses at Fresh Pond, which hold 40,000 tons, and was then finishing a stack of ice, of 20,000 tons. He explained to me the various operations of cutting and housing the ice, which I will attempt to describe, though a description is not easily given, by a novice.

When ice has formed of sufficient thickness for cutting and storing, the first operation is to remove the snow, if any there be covering the ice, which is done by light wooden scrapers, managed by one man and one horse. If then a surface of snow-ice, or ice formed of snow and water, presents itself, it is removed, not being deemed ed valuable. It is separated from the clear blue ice by the "ice-plane," a machine drawn by two horses, and which shaves two inches deep and twenty-two inches wide, at a time, having guides to it which run in grooves previously made in the ice by the "ice-cutter." The chips made by the ice-plane, are removed in the same way that snow is. All things being now ready for taking the clear blue ice, the first thing done is to get a straight line the whole length of the body of ice to be cut, which is accomplished by setting a stake at one corner of it, and starting from its opposite corner, with a long straight-edged board and a hand ice-marker, the operator places the edge of his board in a range with his starting point and stake, makes a grove in the ice the length of the board, then moves it along its length towards the stake again, places it in range and continues the grove, and so on, till the whole line is obtained. It is important that this line should be straight, as the regularity of all the cakes of ice to be cut is governed by it; and if they are not of uniform size, they will not pack properly in the houses. This grove is then deepened by a marker drawn by one horse. Then follows the "ice-cutter," a machine something in the form of a boy's sled, made wholly of iron and steel, its runners being a series of steel cutting chisels, making grooves two inches deep at a time, and twenty-two inches apart, one runner going in the groove previously made, and the other making a new groove. The cutter is passed back and forth until the whole body of ice to be secured is grooved into strips twenty-two inches wide, and of about two-thirds the depth of the ice, and then the same operation is performed at right angles to these groves, checking the ice off into blocks twenty-two inches wide, each way.

The ice is now to be separated from the main body, and conducted to the houses for storage. The outer grooves, on one end and one side of the body of ice thus prepared, are opened clear down, by an ice-saw worked by one man, and another man with a sharp blade or chisel, about one-third the size of a shovel blade, and having a long handle, presses his instrument into every third groove, each way, so that blocks of ice five and a half feet wide, each way, are readily separated from the main body. These larger blocks contain three grooves, each way, and nine smaller blocks, twenty-two inches wide each way. Blocks are taken from the main body of this size, because it is a convenient size to float to the shore, and just about right in weight for one horse to elevate upon an inclined plane from the water to the reception platform beside the ice-house. The blocks are conducted by men with hand spikes to the shore alongside the ice-houses, through channels of water kept open for the purpose. They are then one at a time elevated by horse power to the reception doors of the houses, where men are ready to take them, and pass them along on wooden rails to their places in the house, where by striking a chisel lightly into the grooves, they instantly separate into nine blocks each, of twenty-two inches wide, and of such thickness or depth as the ice may have formed. Mr. Hittinger remarked to me that a formation of ice thirteen inches in depth is, on the whole, most desirable and easiest managed. These smaller blocks are laid up in regular courses, so that when the house is filled, the ice is almost as solid and regular as masonry.

The tools used in this business are its own; peculiar and beautiful. They are of great variety; many of them are costly, but very effective. The "ice-cutter," alone, is considered as of the annual value, to the ice-cutting business of the northern United States, of twenty thousand dollars. It has spread abroad into several states, and has even gone to Russia.

The ice-houses which I saw at Fresh Pond, are built above ground, and as near the margin of the pond, as circumstances allow. Messrs. Gage, Hittinger & Co.'s houses are built of wood. They are 90 feet long, by 32 feet wide, and twenty foot posts. They take 45 blocks of ice lengthwise, and 16 blocks widthwise,—the number of tiers in height being governed by the thickness the ice in different seasons may have formed. They have double walls, formed by framing two ranges of joists upright, into plates at the top, and sills at the bottom. The outer range of joists is boarded up on the inside, and the inner range on the outside, leaving a clear space between the two boardings, of two feet in width. This space is filled with spent tan-bark, well trodden down. Once in about every five feet in perpendicular height of the two ranges of joists, they are confined together, by iron straps, to prevent the sides of the house from warping out of shape.

The roofs are of rafters and shingles, in the usual manner of building. The bottoms of the ice-houses are of earth, over which wood-shavings are placed previous to getting in ice. When the houses are full, the ice is covered about ten inches deep with dry shavings. In the southern latitudes to which ice is sent, the houses are expensively built, usually of stone or brick, with double walls, containing either double air-spaces, or spaces filled with light, dry vegetable matter. Their excessive cost is quite a hindrance to the enlargement of the trade; and if this could be modified, the business would advance more rapidly. Mr. Tudor has alone, $100,000 invested in these buildings in New-Orleans.

Mr. Hittinger informed me, that when the weather is good, and the business is in full blast, he can employ 250 men, and 70 to 100 horses, in the various methods of securing ice; and that on such occasions, from 2 to 3,000 tons of ice are housed in one day, at an expense varying all the way from 10 to 50 cents per ton, the cost depending upon circumstances, favorable or otherwise. While I was reviewing his operations, 30 cars, holding in all, 240 tons of ice, were loaded in three quarters of an hour, or at the rate of a car in a minute and a half. The ice was taken to the wharf in Charlestown, to fill a vessel then loading. Five horses, each taking a block 5½ feet wide each way, and following each other in quick succession, drew the ice from the pond, up an inclined plane, to a platform level with the floor of the car; in an instant the block was separated into nine blocks twenty-two inches wide, which were loaded by hand into the car. The workmen acquire great dexterity in handling, packing or loading ice, and are accustomed to the exertion of their utmost activity; but it was a wonder to me in this instance, how they got through with the loading process, without broken bones. While cutting and securing ice, as many vessels are loaded as can be, because once handling of the ice is saved. A railroad track is so laid as to accommodate the business, and one engine draws a very long train at a trip.

The vessels for receiving and transporting ice, are prepared with a thoroughness proportioned to the length of voyage, and time of accomplishing it. For a voyage to Calcutta, the ice-house of the vessel has first a floor of boards, then shavings, next saw-dust, and then shavings again, in all two feet in thickness. The sides of the house are so boarded as to give a space of some eighteen inches between the boarding and the sides of the vessel, which space is filled with dry saw-dust, packed in as solid as possible. The ends of the house are double boarded, with a like space for saw-dust. The ice is covered over with dry shavings. The water formed by the melting of the ice, leaches through the bottom of the house into a well-room, and is daily pumped out during the voyage. For New-Orleans and the West-Indies, the preparation of vessels is less thorough.

Some years, the winters in the immediate vicinity of Boston are feeble, and parties engaged in the trade find it necessary to seek more shallow waters, or to go up the railroads westward, to ponds away from the tempering of the cold by the impulse of the sea. To meet this difficulty, Mr. Tudor is now making an artificial pond, in a low meadow on his farm, on the shores of Fresh Pond. It was last fall completed to the extent of four acres of surface, and the work is to proceed forthwith when the season will allow. It is to be four feet deep, to cover 20 or 25 acres of ground, and to be fed with pure, fine water from the overflow of Fresh Pond. It is estimated that its construction will cost something below one thousand dollars per acre. Its superior excellence in producing early ice, has been proved this season, by its showing an ice-surface early in December, six inches thick, while the deep pond bordering on it, was without any ice.

Calling at the counting-room of Messrs. Gage, Hittinger & Co., in Boston, some conversation was had as to the best construction of ice-houses for private families in the country. Mr. Gage remarked, that an ice-house built below the surface of the ground, under a carriage-house, wood-shed or barn, would best preserve ice, such a covering being a good protection from the excessive heat of mid-summer; the cheapest walls for the house, in the long run, would be those made of stone, laid in cement; that if walls are to be made of a frame work of timber and boards, there should be a foot of space all round between the sides of the house and the earth-sides, to be filled up solid with tan-bark—that being a non-conductor, and tending greatly to protect the ice from the warmth of the ground; that a layer of wood shavings should be spread over the bottom before putting in ice; that the ice should be closely packed, and when all in, should be covered about ten inches thick with dry clean shavings, such thickness being better than more, because if too thick a covering is put over the ice, the vapor arising will be confined, and heat will thus be generated; and that straw is not a very good covering for ice, because it soaks and fills with moisture, and then lies compactly and heavily upon the ice, thus creating too much heat. Reckoning the expenses of constructing family ice-houses, of repairing them from time to time, and of annually filling them, the yearly cost to a family of the luxury of ice will not fall much under ten dollars. In large villages, where a good deal of ice is wanted, families might consent to be supplied, daily, semi-weekly, or weekly, with a given amount of ice, at a stated price by the year, or otherwise. An enterprising individual, or a company, in a village, might erect an ice-house of suitable size for supplying the demand, locating it in a convenient spot contiguous to waters producing fine ice, and do a profitable business at furnishing the inhabitants with ice, at less than half what it costs where individuals separately lay in a yearly stock of it. F. Holbrook. *Brattleboro', Feb.* 10, 1852.

Amount of Cheese per Cow.

Eds Cultivator—In the February number of the Cultivator, under the head "Stock for the Dairy," I find some valuable suggestions upon the best mode of managing a dairy. It appears from the census of 1845, that "the greatest quantity of cheese per cow, returned from any one county, was 226 pounds, from Herkimer; also from the township of Fairfield in the same county, 350 pounds of cheese were returned per cow."

I wish to make a statement through your colums, of the amount of cheese made per cow, from some of the dairies in the town of Newport in the county of Herkimer. James Keith keeps a dairy of thirty-one cows; and in 1850, made 20,000 pounds of cheese. He also sold one firkin of butter, besides furnishing milk, butter and cheese for a family of nine persons. The cows had a little extra feed in the spring of the year. This will give about 650 pounds per cow. Nicholas Smith made from 20 cows, a fraction over 12,000 pounds, extra feed in the spring of the year. Alpheus Spencer in 1851, made from 53 cows, 27,000 pounds of cheese, besides a couple of firkins of butter. John A. Fenner in 1850, from thirty cows, made 15,600 pounds of cheese, besides furnishing milk, butter and cheese for nine persons. There are numbers more of dairies which would compare very nearly with the above. I think the average yield per cow in the town, would be about 400 pounds. S. F. *Newport, Herkimer county, N. Y.*

A few Facts from the Horticulturist.

From a late number of this admirable Magazine, we extract the following, well worthy of notice:

Select Strawberries.—The best five for family use are, Large Early Scarlet, Burr's New Pine, Hovey's Seedling, Hudson and Crimson Cone.

Lawns.—Red top or blue grass, mixed with white clover, make the best lawns; three-fourths of either of the former, and one-fourth of the latter—sown three times as thick as usual, early in spring, on dry mellow ground, rolled perfectly smooth.

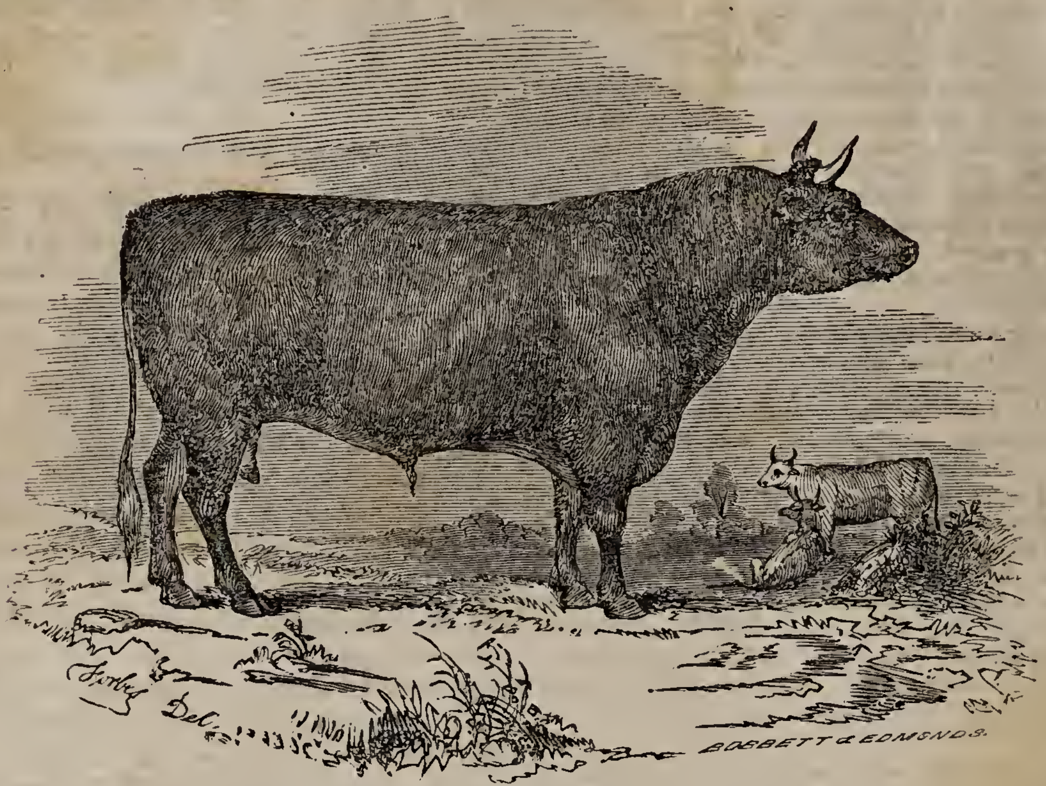
The Monarch Pear.—This, with others of the best of Knight's celebrated pears, is put down as second rate, and some of them far below that.

Magnolias.—The only one hardy enough for Maine is the Cucumber tree, *M. acuminata*. *Conspicua* and Soulangiana, have borne 20 degrees below zero, on the Hudson.

Roses.—The 12 following everblooming hardy roses are recommended as best: *Hybrid Perpetuals*—Madame Laffay, Giant of Battles, Baron Prevost, William Jesse, La Reine, Duchess of Sutherland, Aubernon; *Bourbons*—Madame Desprez, Bouquet de Flore, Souvenir de Malmaison, Pierre de St. Cyr, Mrs. Bosanquet.

The best hardy climbing roses, for "the most northern states,"—Boursalt Elegans, Queen of Prairies, Baltimore Belle, Superba, Eva Corinne.

Profits of Fruit.—"We could point to 10 acres of ground," says the Editor, "from which a larger income has been produced, than from any farm of 500 acres in the country." It may be well to add, that this result was doubtless obtained by the combined action of knowledge, industry, and skill, of the highest kind.


Forbes Del.
BOBBETT & EDMONDS.

Devon bull, the property of W. P. and C. S. Wainwright, Rhinebeck, Dutchess county, N. Y.—received the first premium for Devon bulls over three years old, at the show of the N. Y. State Ag. Society, 1851. This animal, now owned by R. H. Van Rensselaer, Morris, Otsego county, N. Y., was bred in England by Mr. Quartly, one of the most eminent breeders and improvers of Devon stock. He is a bull of superior points—one of the best of the breed we have ever seen. The artist, unfortunately, has taken the animal in a position by which the figure does him injustice—failing to show the substance, and at the same time delicacy of points and general symmetry, which are united in a remarkable degree.

Advantages of Mules over Horses.

Eds. Cultivator—Having of late received several inquiries respecting the advantage of mule labor over that of the horse, and thinking some communication on this subject might be interesting to your readers, I take the liberty of addressing to you my own experience.

For nearly three years, I have made use of two pairs of mules, and most of the time of one span of horses. The present season, I have two heavy spans of horses, the one weighing about 2200 lbs., the other 2350—while the pairs of mules weigh only 1700 and 1900 lbs., respectively. The horses and mules have both been used in hauling wood, the average load being a cord of green oak. The heaviest pair of mules can outdraw either of the spans of horses, and are now in as good condition as in the fall, while the horses have fallen away very much. In the winter, when taxed to their utmost capacity, the mules are fed 12 quarts of oats each, per day, and the horses 20 quarts; the amount of hay consumed by each being in nearly the same proportion. When not in constant use, the mules are fed little or no grain, and in the summer may be allowed to go unshod without injury. They suffer less than horses from the heat; are not so easily teased by the flies, and are equally hardy to the cold. They are far less subject to disease, and will endure constant labor for a much longer time. As they walk so as to bring their feet almost in an exact line, they are superior for plowing and working between the rows of growing crops, being less liable to tread them down. When hitched to a load, their walk is more rapid than the horse, and I consider them preferable in almost every particular, except for quick or pleasure driving. The mule is not a gormandizer, and if fed sufficiently at night, and it is not convenient to feed again till the next, he experiences no inconvenience.

The first cost of a good pair of mules, is more than a span of working horses; but the mule capital will last for thirty years, while the entire horse capital must be renewed, at least every ten years. My estimate for the relative expense of keeping a horse and mule team, in working order, is as follows:

Span of horses, one year.

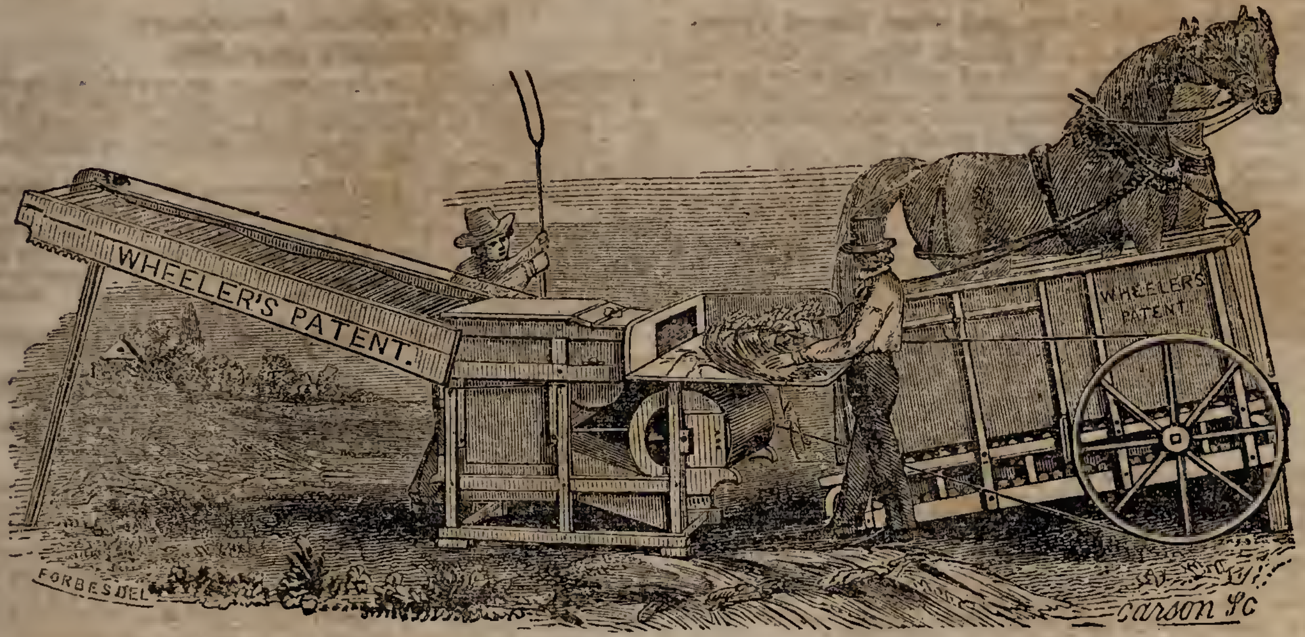
20 quarts oats each, per day—451 bushels at 37½ cts	$171 00
5 tons hay, at $8 per ton,	40 00
Shoeing once a month, half new,	18 00
Farrier's bill, on an average,	5 00
Depreciation each year 10 per cent on $200,	20 00
	$254 00

Pair of mules, one year.

12 quarts oats, each per day—273 bushels,	$102 00
3 tons of hay,	24 00
Shoeing once in six weeks, half new,	12 00
Depreciation 3 per cent on $350,	10 50
	$148 50
Making a balance in favor of mules of	$105 50

A mule is no more likely to be vicious than the horse. Their vision and hearing seem to be better, and they never take fright—a danger from which you are never secure with the horse.

The breeding of mules is an extensive business in some sections of the western states. They are mostly bought by New Haven shippers, and shipped at the age of three years. The market price of unbroken mules at New Haven, Ct., in large lots, is about $80 each. This is the best place to purchase, as they can then be selected from



New-York State Agricultural Works, Albany, N. Y.

BY WHEELER, MELICK & CO.

THE subscribers are this season enabled to offer to Farmers, a new and most useful and valuable Machine. The successful combination of a WINNOWER with our Overshot Thresher proves another of its great advantages. The Winnower is attached with much less Geering than in the Undershot Machines, rendering it much more durable and compact, and more easily propelled. It has now been fairly tested, (a large number having been in constant use during the past Threshing season,) and has already in some instances, superseded the most approved of the other kinds of Winnowers, the owners of which have thrown them aside after a thorough trial of ours. We have numerous commendatory letters from gentlemen who have purchased and used our Winnower, and we give extracts from a few of them.

Extract from a Letter from Wm. Osborn, Esq., of Waterville, N. Y.

Messrs. WHEELER, MELICK & Co.:

Gentlemen—My Uncle wishes me to say to you that his Winnower more than answered his expectations. My own opinion may be gathered from the fact that I want one as soon as you can forward it. It is unquestionably the most perfect thing ever got up for Threshing and Cleaning. I have considerable acquaintance with labor-saving Agricultural Machines, and I never yet saw any thing which for its simplicity and perfect adaptation to the wants of Farmers, compared with your Machine.

From E. French, Esq., Bridgeport, N. Y.

Messrs. WHEELER, MELICK & Co.:

Gentlemen—If you could see the admiration your Winnower receives from all, you could not help feeling proud of it. You may expect several orders from here next season. My neighbors are scrambling for their turn to have me do their threshing, but will not employ other machines although they go about begging for work.

From J. Glendenning, Esq., Newport, R. I.

Messrs. *Wheeler, Melick & Co.:*

Gentlemen—I am pleased to say that the Thresher and Winnower exceed my most sanguine expectations. I can get through 350 to 400 bushels of oats per day.

From J. H. Crewell, Esq., Columbia, N. Y.

Messrs. *Wheeler, Melick & Co.:*

Gentlemen—The Thresher and Winnower you sent proves to be beyond my expectations. I have the pleasure of writing to you for one more, if you can furnish it within the next three or four weeks.

We might add many more equally flattering testimonials.

Price of Double Power with Thresher and Winnower,....... $225

The superiority of WHEELER'S PATENT RAILWAY CHAIN HORSE POWER, and OVERSHOT THRESHER and SEPARATOR is universally acknowledged wherever they have been tested. Thousands of them are in use, many of which have threshed from 50,000 to 100,000 bushels of grain, and are still in good condition. They are beyond doubt the most durable and economical machine in use. Their capacity has been tested by repeated trials as well at the New-York and Pennsylvania Fairs as, as on several private occasions in competition with another machine made in this city, which has been advertised to be far superior to ours, and in every instance the result has been about *one third*, and in some instances more, in favor of our machines. In every case except one where we have submitted our machine to a *working* test at Fairs, it has taken the highest premiums, and in that excepted case the Committee decided that our machine performed its work in 8 minutes and its competitor in 11¾ minutes, being nearly one-third in favor of ours.

We have also exhibited ours in competition with the same machine at the State Fairs in Ohio, Michigan and Pennsylvania, and also at the Provincial Fair of Upper Canada, at all of which we received the highest premiums, viz: In Ohio a Silver Medal and Diploma; in Michigan $20; in Pennsylvania $10; and in Canada a Diploma.

We have numerous similar testimonials from County Societies, where we have always received the highest premiums awarded to Chain Powers.

Price of one Horse Power, Thresher, Separator and Belting,.. $120
Two Horse do.,......... 145

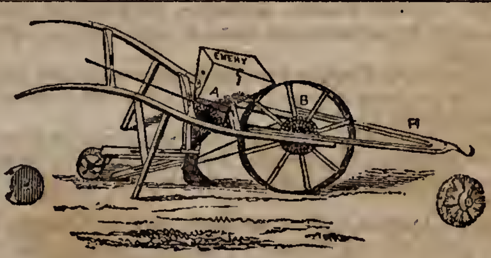
Besides the above we manufacture and keep constantly on hand among other articles, Clover Hullers Straw and Stalk Cutters, Portable Saw Mills (adapted to Horse Powers,) and Single Powers with Churn Geer attached. These last are extensively used in large Dairies, and are so arranged that the Power is used at pleasure for either threshing, churning, wood sawing, or other purposes.

☞ All machines made and sold by us are *warranted to give satisfaction* or they may be returned, after a reasonable time for trial.

Orders are solicited and will be promptly filled.

WHEELER, MELICK & CO.,
Corners of Hamilton, Liberty & Pruyn Streets.
(Near the Steamboat Landing,) Albany, N. Y.

April 1, 1852—1t.



Emery's Seed Planter,

WARRANTED the best for sowing all kinds of seeds, whether by their gravity, or by forcing with brush. And any desired amount of seed, from half a pound of Turnep, Carrot, or Beets, to four bushels of Corn, Peas, or Beans, per acre—and in continuous drills or hills, any distance apart, from three inches to eight feet; and equally well adapted for hand use or for horses. Over one thousand of them have been put in use during the past four years, without an instance being known of failure to give satisfaction. We have just completed four hundred for this spring sales, and all orders should be sent in early, to insure being filled in time, as no more will be made. Price; $14.

Field and Garden Seeds.

The subscribers are receiving, and have on hand, a choice lot of Field Seeds, composed in part of

Black Sea Spring Wheat, both red and white chaff.
Italian and Hedge Row Spring Wheat.
Spring Rye and Barley.
Black Tartarian and Poland Oats, very superior for weight and quality.
Broom Corn Seed, superior quality.
Clover, large, small, and white Dutch.
Red Top, northern and southern.
Timothy and Orchard Grass.
FLAX and HEMP seeds.
TOBACCO Seed, BROAD and LONG leaf.
PEAS—a choice assortment of Garden Peas.
Field and Garden Peas.

Also a choice assortment of fresh GARDEN SEEDS, warranted true to their name. The attention of Gardeners is particularly called to the assortment. For sale by

Albany, April 1, 1852. EMERY & CO.

Balsam Fir, Arbor Vitæ, and other Forest Trees.

HENRY LITTLE & CO., of Bangor, Maine, will furnish any number of Evergreen and other Forest Trees, taken up with *earth on the roots*, with the greatest care, and sent to any part of the United States by Steamers or Railroad—and carefully packed in large boxes, at short notice, at the following prices, viz:

From 6 inches to 1 foot, at 1 cent, or $10.00 per 1000.
From 1 foot to 2 feet, at 1½ cents, or $15.00 per 1000.

The above prices refer more particularly to Balsam Fir and Arbor Vitæ Trees.

We charge what the boxes cost, but nothing for packing.

For two years past, the trees we have procured and sent to a distance, have lived generally, and have given good satisfaction. Evergreens will not live unless taken up with great care.

Bangor, Jan. 1, 1852—4t.

GENEVA NURSERY,

On Castle Street, Geneva, New-York.

W. T. & E. SMITH, Proprietors,

INVITE the attention of Fruit Growers, and Planters of Trees generally, to their large stock of well grown Trees, grafted and budded by the proprietors themselves, with great care. Greater inducements are offered here than at any other Nursery. Our stock of trees consists of the following kinds:

40,000 Apple Trees, well grown, with fine heads.
10,000 Pear, the best sorts.
30,000 Peach, the best sorts, one and 2 years old.
12,000 Cherry, fine trees.
1,000 Plum.
2,000 Isabella Grapes, one and 2 years old.

Dwarf Pears, Dwarf Apples, Quinces, Apricots, Nectarines, Almonds, Raspberries, Strawberries, Gooseberries, Currants, Pie Plant, Asparagus Roots, Dahlias, &c. Ornamental Trees, Buckthorn, English Hawthorn. Scions, Seedling Stocks for Nurserymen, &c., &c.

March 1—2t. W. T. & E. SMITH.

Highland Nurseries, Newburgh, N. Y.

A. SAUL & CO. have the pleasure to announce to their *patrons*, and the *public in general*, that their stock of

FRUIT AND ORNAMENTAL TREES, SHRUBS, &c.,

which they offer for sale this spring, is of the very best quality, and embraces everything in their line that can be procured in the trade.

Dealers and Planters of trees *on a large scale*, will be treated with on as liberal terms, as can be done by any establishment of reputation in the country; they flatter themselves that for correctness of nomenclature of fruits, (which is a serious consideration to planters,) that their stock is as nearly perfect as can be, having all been propagated on their own grounds, *from undoubted sources*, under the personal supervision of Mr. Saul.

They have propagated in large quantities, *all the leading and standard varieties*, which *are proved* to be best adapted for general cultivation, especially those recommended by the American Pomological Congress, at its several sessions, as well as all *novelties*, and certain kinds particularly suited to certain sections and localities of the Union, and the Canadas.

Their stock of Pear Trees is the largest they have ever had to offer for sale, and among the largest in the country, and consists of over 50,000 saleable trees.

The stock of Apple Trees is also very large, as well as Plums, Cherries, Apricots, Peaches, Nectarines, and Quinces, also Grape-vines, Gooseberry, Currant, Raspberry, and Strawberry plants in great variety, &c., &c.

Also Pears on Quince, Cherry on Mahaleb, and Apple on Paradise stocks, for Pyramids and Dwarfs for garden culture, and of which there is a choice assortment of the kinds that succeed best on those stocks.

Deciduous and Evergreen Ornamental Trees and Shrubs.

100,000 Deciduous and Evergreen Ornamental Trees, embracing all the well known kinds suitable for street planting, of *extra size;* such as Sugar and Silver Maple, Chinese Ailanthus, Horse Chestnut, Catalpa, European and American Ash, Upright lentiscus leaved Ash, Upright Gold Barked Ash, Flowering Ash, Three Thorned Acacia, Kentucky Coffee, Silver Abele Tree, American and European Basswood or Linden, American and European Elm in several varieties, &c. Also all the more rare and select, as well as well known kinds suitable for Arboretums, Lawn and door-yard planting, &c.; such as Deodar and Lebanon Cedars; Araucaria or Chilian Pine; Cryptomeria japonica; the different varieties of Pines, Firs, Spruces, Yews, Arborviteas, &c.

WEEPING TREES.—New Weeping Ash, (Fraxinus lentiscifolia pendula,) the old Weeping Ash, gold barked Weeping Ash, Weeping Japanese Sophora, Weeping Elms (of sorts,) Umbrella Headed Locust, Weeping Mountain Ash, Weeping Willow, Large Weeping Cherry, Weeping Birch, Weeping Beech, &c., &c.; together with every variety of rare Maple, Native and Foreign; Flowering Peach, Almond and Cherry; Chestnuts, Spanish and American; Purple and Copper Beech; Judas Tree, Larch, Gum Tree, Tulip Tree, Osage Orange, Paulownia, Mountain Ash, (American and European,) Magnolias of sorts, with many other things—including some 200 varieties of Shrubs, Vines, Garden and Climbing Roses in great variety; such as Hybrid Perpetuals, or Remontants, Hybrid China, Hybrid Bourbon, Hybrid Damask, Hybrid Provence, Bourbon, Tea, China, Noisette and Prairie Roses; also Herbaceous Plants in great variety, &c., &c., for which see Catalogue, a new edition of which is just issued, and will be forwarded to all post-paid applicants.

A large quantity of Arborvitæ for Screens, and Buckthorn and Osage for Hedge plants.

Newburgh, March 1, 1852—2t.

New Staminate Strawberry.

WALKER'S SEEDLING.

THIS new variety of the Strawberry is for sale and will be sent out, to applicants in the spring of 1852, price one dollar per dozen. Orders may be addressed to Samuel Walker, Roxbury, or to Mr. Azell Bowditch, at the Massachusetts Horticultural Seed Store, School Street, Boston.

The Fruit Committee of the Massachusetts Horticultural Society, report of the variety as follows:—"Walker's Seedling;" this strawberry has now been fruited three years; it is a dark colored berry, of good size, a very abundant bearer, of high flavor, very fine quality, and it will be, it is believed an acquisition. It is a staminate, worthy, as the committee think, of an extended cultivation. *Boston, June 28th*, 1851.

Fruit, Ornamental and Evergreen trees, shrubs, &c., for sale at the nurseries of SAMUEL WALKER,

Feb. 1—3t. Roxbury, Mass.

GREAT COLLECTION OF FRUIT TREES.

HOVEY & CO., Cambridge Nurseries, near Boston, Mass.,

INVITE the attention of cultivators of choice fruit to their very extensive collection of fruit trees, of all kinds, more particularly of pears, embracing every variety worthy of cultivation, to be obtained either in Europe or this country. Of all their immense varieties, *specimen* trees have been planted out on the borders of the walks, numbering more than *twelve hundred* trees, most of which are now in bearing, affording a fine opportunity for the inspection of the fruit.

EIGHTY THOUSAND PEAR TREES,

are now offered for sale, embracing all the popular, proved, and well known sorts, as well as every new variety, of recent introduction. Their stock is unusually fine this year, and they invite the attention of dealers and fruit cultivators to their very extensive collection. Trees of all sizes, from *one* to *seven* years old, both upon the quince and pear stock.

3,000 splendid trees of Swan's Orange, or Onondaga, one of the largest and best of autumn pears, one to five years old, many of them full of fruit buds.

6,000 extra sized *pyramidal* trees on the quince, four to six years old, and full of fruit buds.

Apples.—Upwards of 200 varieties, including all the new and superior sorts.

Cherries.—More than 75 of the very finest kinds in cultivation.

Plums.—Upwards of 60 varieties, including among them the McLaughlan, Gen. Hand, Reine Claude de Bavay, Drap d'or Esperin.

Peaches.—Nearly 80 choice sorts, embracing Stetson's Seedling, White Ball, Reine des Verges, &c.

Apricots, Nectarines, and *Quinces* of all the best kinds.

Raspberries, Strawberries, Currants, Gooseberries, &c. in variety.

Improved High Blackberry, one of the finest fruits in cultivation

Grapes.—Sixty varieties of the finest foreign kinds; all cultivated in pots and suitable for graperies; also the DIANA, which H. & Co. first introduced into notice, and which has proved to be the most valuable native grape.

Figs.—Twelve of the best sorts, including the Black of St. Michaels, Nerii, &c.

Scions of the best kinds of Pears, Apples and other fruits.

Stocks for fruit trees, of the Pear, Apple, Quince, Plum, Cherry, &c., by the 100 or 1000.

Hedge Plants —30,000 Buckthorn, Privet, Arborvitæ, &c. **Also,** a great collection of all the finest

Ornamental Trees, Shrubs, and Evergreens.

Among which are the following rare kinds:

Weeping Trees.—Weeping Mountain Ash, Weeping Elm, Weeping Lime, (3 sorts,) Weeping Ash, Weeping Poplar, Weeping Cherry, (2 sorts,) &c.

Rare Shrubs.—Weigelia Rosea, Forsythia Viridissima and Spiræa Prunifolia Pleno, three new and elegant shrubs, by the dozen or hundred. Berberis Purpurea, an unique purple leaved variety, with foliage as dark as the purple beech.

Rhododendrons and Azaleas.—A splendid collection of upwards of 60 varieties, *all perfectly hardy*, and the most magnificent shrubs.

Oaks.—Quercus Fastigiata and Purpurea, two elegant trees, of rapid growth.

Evergaeen Trees.—Deodar Cedar and Cedar of Lebanon, Araucaria, Juniperus Pendula and Suicicea, Siberian Arborvitæ, Pinus Cembra, Cryptomeria Japonica, &c.

Roses.—600 varieties, including 20 sorts of Prairies.

Mahonia Aquifolium, one of the most beautiful evergreen under shrubs, *perfectly hardy.*

Vines and Climbing Plants.—Common Irish Ivy, Large Leaved or Giant do., Gold and Silver Striped do. Wistaria Sinensis, Lonicera Brownii, and other sorts. Clematises in variety, &c., &c.

And a splendid collection of

Green-house Plants, Hardy Perennial Flowers, &c.,

among which 200 varieties of Camellias; 25 of Azaleas; 50 of Pelargoniums; 50 of Verbenas; 600 of Roses; 25 of Carnations; 50 of Phloxes; 30 of Pæonies; 200 of Dahlias, the rare Japan Lilies, &c. &c. Messrs. H. & Co. have been awarded the *highest premiums* by the Mass. Hort. Society, for Roses, Carnations, Azaleas, Camellias, Phloxes, Rhododendrons, Pelargoniums, &c.

☞ Catalogues will be forwarded by mail to all post-paid applicants.

A liberal discount to dealers and to gentlemen purchasing large quantities.

☞ Trees packed safely for transportation to any part of the United States. Address

March 1—2t. HOVEY & CO., 7 Merchant's Row, Boston.

Improved Stock.

CATTLE, of the Durham, Devon, Hereford, Alderney, and Ayrshire breeds.

SHEEP, of the Native and French Merino, Saxony, South-Down, and Cotswold.

PIGS of the Lincoln, Suffolk, and Berkshire breeds.

From our long experience as breeders and dealers in the above kinds of stock, and our excellent situation for purchasing and shipping, we think we can do as good justice to orders, as any other house in the United States. A B. ALLEN & CO ,

Jan. 1, 1852—tf. 189 and 191 Water st., New-York.

For Sale,

A THOROUGH bred Devon Bull. He has been exhibited at "*three*" agricultural fairs, and has taken the first premium at each. He is a very superior animal, and will be three years old next month. THOMAS HANCOCK,

Feb. 1, 1852—3t. Ashton Nurseries, Burlington, New-Jersey.

Ayrshire Bulls for Sale.

THE thorough bred Ayrshire Bulls "General Taylor," and "Young Prince,"—the former is three years old, and the latter two years old next April. Both of them were sired by the Massachusetts Society's Imported Bull "Prince Albert," and are out of the fine full blooded Cows "Diana," and Primrose. They are in color dark brown—perfectly sound and docile, and are in all respects as desirable animals for breeders of dairy stock, as can be found in the country. For terms apply to SAMUEL HENSHAW.

Boston, March 1, 1852—3t.

Black Hawk Colt.

THE BLACK HAWK COLT RAVEN, will stand at the stable of the subscriber, the ensuing season, will serve a limited number of mares. Raven will be four years old the first of June next. He resembles his noted sire closely, except that he is larger, weighing at this time about 1100 lbs. He gives promise of making an extraordinary trotter, and is one of the *very best* of the Black Hawk Colts. His dam is a much admired Morgan mare—great grandsire, Cock of the Rock.

The subscriber also offers for sale his Two-Year Old Stallion Colt, Falcon; sire, Falcon—grandsire, Black Hawk—dam, a well blooded Virginia mare. Falcon is a very beautiful animal, possessing in a remarkable degree the Morgan characteristics—of a kind and docile temper, already well broke to the harness, in which his action is bold and elegant. If he is not sold he will remain at the stable of the subscriber for the coming season. ROBBINS BATTELL.

Norfolk, Conn., March 1, 1852—3t.

FOWLS AND EGGS.

THE great desire manifested in New-England for procuring good Poultry, has induced H. B. COFFIN, *Newton*, *Mass.*, to pay particular attention to breeding and importing first rate stock. All persons desirous of having the purest and best to breed from, may depend upon being faithfully served. Among many kinds of Fowls for sale by him, are the following, which he is very particular in breeding.

Shanghae—Forbes stock.
Imperial Chinese—Marsh stock.
Chittagongs.
Royal Cochin China.
Black Shanghae.
Burmah Pootras.
White Shanghais.

Dealers in Fowls or Eggs for hatching, supplied upon liberal terms. Orders addressed to *No.* 40 *State Street*, *Boston*, will be promptly executed.

Reference to Mr. J. VAN DUSEN, of Cincinnati, Ohio, who wil take orders for Fowls, as advertised above.

Boston, Aug 1, 1851—12t.

TO FARMERS.---POUDRETTE.

THE LODI MANUFACTURING COMPANY having enlarged their works, are prepared now to receive and fill orders for Poudrette with dispatch, and in all cases with a *freshly manufactured article*, at their usual prices, $1.50 per barrel for any quantity over six barrels, 3 barrels for $5.—$2 for a single barrel, delivered free of cartage on board of vessel or elsewhere, in the city of New-York.

The Company refer to their pamphlet (furnished gratis) for hundreds of certificates as to the efficacy, cheapness, and superiority in all respects of their Poudrette over any other known manure for raising a crop of corn—also to A. J. Downing, Esq., B. M. Watson, Esq., Hon. J. P. Cushing, J. M. Thorburn & Co., and many others as to excellency as a manure for flowers and trees, and the following from Hon. Daniel Webster, Secretary of State:

WASHINGTON, March 19, 1850.

"If I neglect the annual purchase of some af this article, my gardenerer is sure to remind me of it. He thinks it almost indispensable, within his garden fence; but there are uses, outside the garden, for which it is highly valuable, and cheaper, I think, than any other manure at your prices. A principal one, is the enrichment of lawns and pleasure grounds, in grass, where the object is to produce a fresh and vigorous growth in the Spring. Our practice is to apply it, when we go to town in the Autumn, and we have never failed to see its effects in the Spring."

All communications addressed to the "LODI MANUFACTURING COMPANY, 74 Cortlandt street, New-York," will meet with prompt attention. Jan. 1, 1852—6t.

New and Important Insurance.

Northern N. York Live Stock Ins. Co., Plattsburgh N. Y.

INCORPORATED by the Legislature of the State of New-York, July, 1851. Horses, Cattle, and all kinds of Live Stock insured against Death, by the combined risks of Fire, Water, Accidents, Diseases, &c. CAPITAL, $50,000.

DIRECTORS.

James Farr,	Washington county.	Amasa C. Moore,	Clinton connty.
Joseph Potter,	do	John Boynton,	do
Olif Abell,	do	Zephaniah C Platt,	do
Pelatiah Richards,	Warren co.	Cornelius Halsey,	do
Walter Geer,	do	James Averill,	do
Wm. E. Calkins,	Essex co.	Jacob H. Holt,	do
Albert Andrns,	Franklin co.	Peter S. Palmer,	do
John Horton,	St. Lawrence co.	George Moore,	do
Thomas Conkey,	do	Henry G. Hewitt,	do

JAMES FARR, President. G. MOORE, Plattsburgh, Sec'y.
A. C. MOORE, Vice-Pest. Z. C. PLATT, do Treas.
I. C. MIX, Port Ann, Gen. Agent.

October 13, 1851.

This company are now organized and ready to receive applications for insurance. It is confidently believed that the owners of valuable animals will avail themselves of the advantages offered by this mode of protection. If fire, life and marine insurances are proper and expedient, so is live stock insurance: the reasons for insurance are equally applicable to all.

The company have adopted such rates as, they believe, will furnish the means of paying ordinary losses, without resort to an assessment. But to guard against extraordinary losses, which may arise from contagious diseases or epidemics, it becomes necessary to require premium notes.

To the Owners of Horses and Live stock.

Office of the Northern New-York Live Stock Ins. Co.,
PLATTSBURGH, August 16, 1851.

The Directors of the above Company, incorporated by the Legislature of the State of New-York, at its extra session in July, 1851, respectfully request your attention to the following facts bearing on this subject.

1st. Value of this class of property. By the censns of 1845, there were at that time in the State of New-York, as follows:

Horses,	
One-half a million,	505,155
Neat Cattle,	
Over two millions,	2,072,330
Cows milked,	
Nearly a million,	999,490
Sheep,	
Over six millions,	6,443,855
Hogs,	
Over one million and a half,	1,584,344

Without making any estimate of the value of this property, it is apparent that it is immense; extending to every inhabited spot, and essential to the health and comfort, almost to the existence of the inhabitants

2d. These animals are subject to disease and accident. It is asserted by a Vermont Company, engaged in the Live Stock Insurance, as a fact which cannot be disputed, that the aggregate loss upon this species of property throughout New-England, is *greater* than the losses by fire; at all events, it is a fact undoubted that the annual loss is very great, and the owner is left unprovided with any means of security against the hazard incident to this description of property.

3d. The knowledge of this risk is one of the leading hindrances to improvement in the breed of that useful aud noble animal, the horse.

Men of capital are slow to invest large sums in a valuable animal, whose loss they must every day risk, to the amount often from five hundred to a thousand dollars, in every valuable breeding horse.

With the ample security to be afforded by sound Insurance Companies, the investment of capital in horses and live stock may be made as safe and safer than the carrying of freight on the seas and inland waters. Marine Insurance has rendered this last business steady and profitable; while without it, it would want the confidence which that branch of business now commands. The absence of this Insurance in the case of live stock is universally felt, while the owner of real estate can command half or two-thirds of its value when needed for an emergency.

While the owner of the ship, "the play thing of the wind and waves," may obtain any reasonable advance; the owner of equally valuable property, invested in horses and cattle, cannot obtain a dollar. The only exception being fat cattle destined for market. In vain does the owner of the horse appeal to his industry or usefulness. The answer is, that his property is liable to disease and accident, and that as security it is utterly worthless.

4th. The Insurance principle comes in, and does for him what Life Insurance has done for the young beginner in trade, taking away the risk arising from the uncertainty of life.

It will do for him what Fire Insurance has done for the owner of personal property; placing him nearly on a level with the owner of real estate.

Your aid is respectfully solicited in behalf of this company, the first chartered in this state for this object. The Directors intend it shall be prudently conducted, and one which shall deserve the confidence of the public.

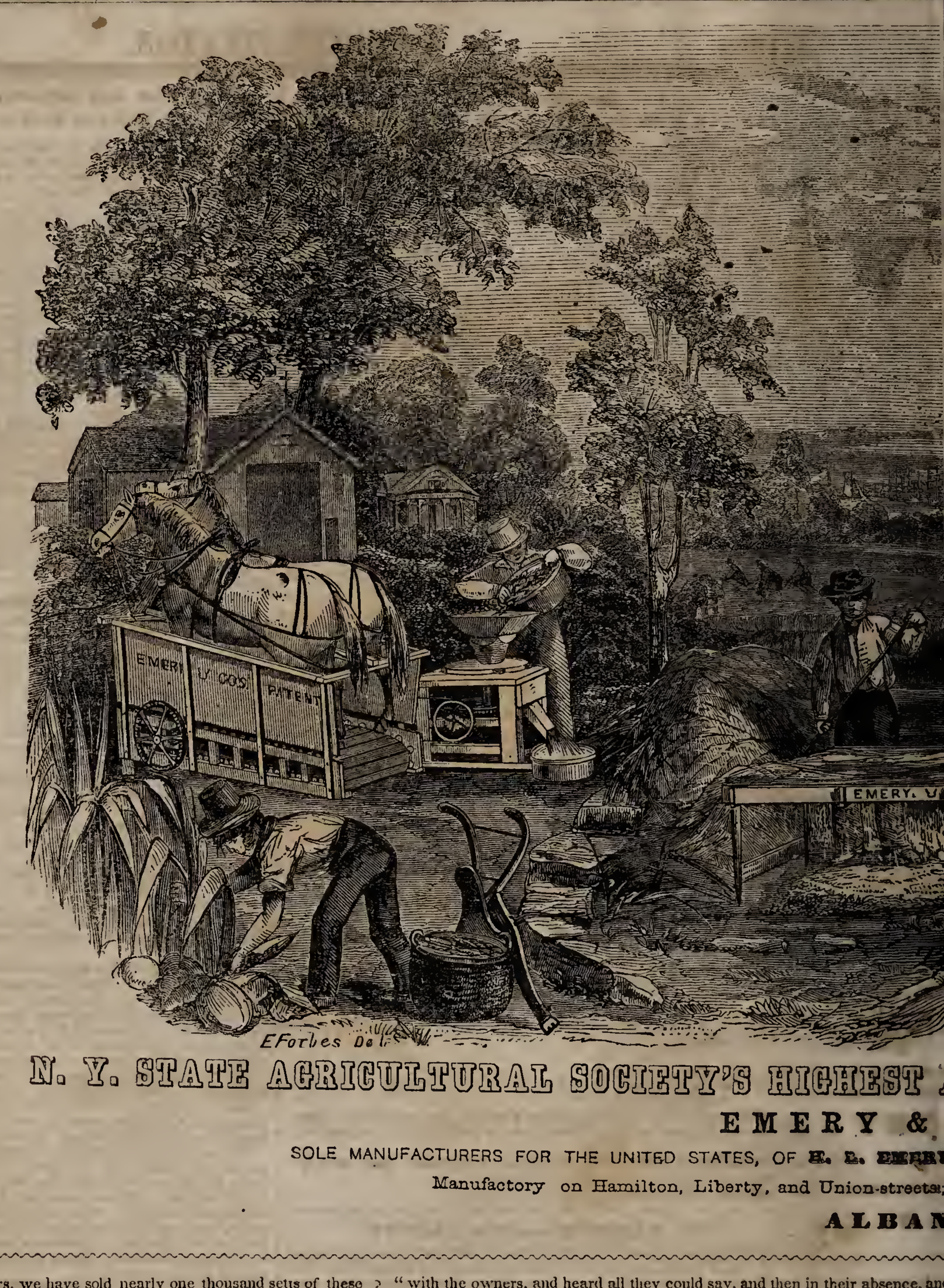
Terms of insnrance will be furnished by the agents of the company.

GEORGE MOORE, Seoretary. JAMES FARR, President.

Dec. 1—6t.

Agricultural Books

OF all kinds, for sale at the Cultivator Office, 407 Broadway, Albany.



N. Y. STATE AGRICULTURAL SOCIETY'S HIGHEST

EMERY &

SOLE MANUFACTURERS FOR THE UNITED STATES, OF H. L. EMER

Manufactory on Hamilton, Liberty, and Union-streets;

ALBAN

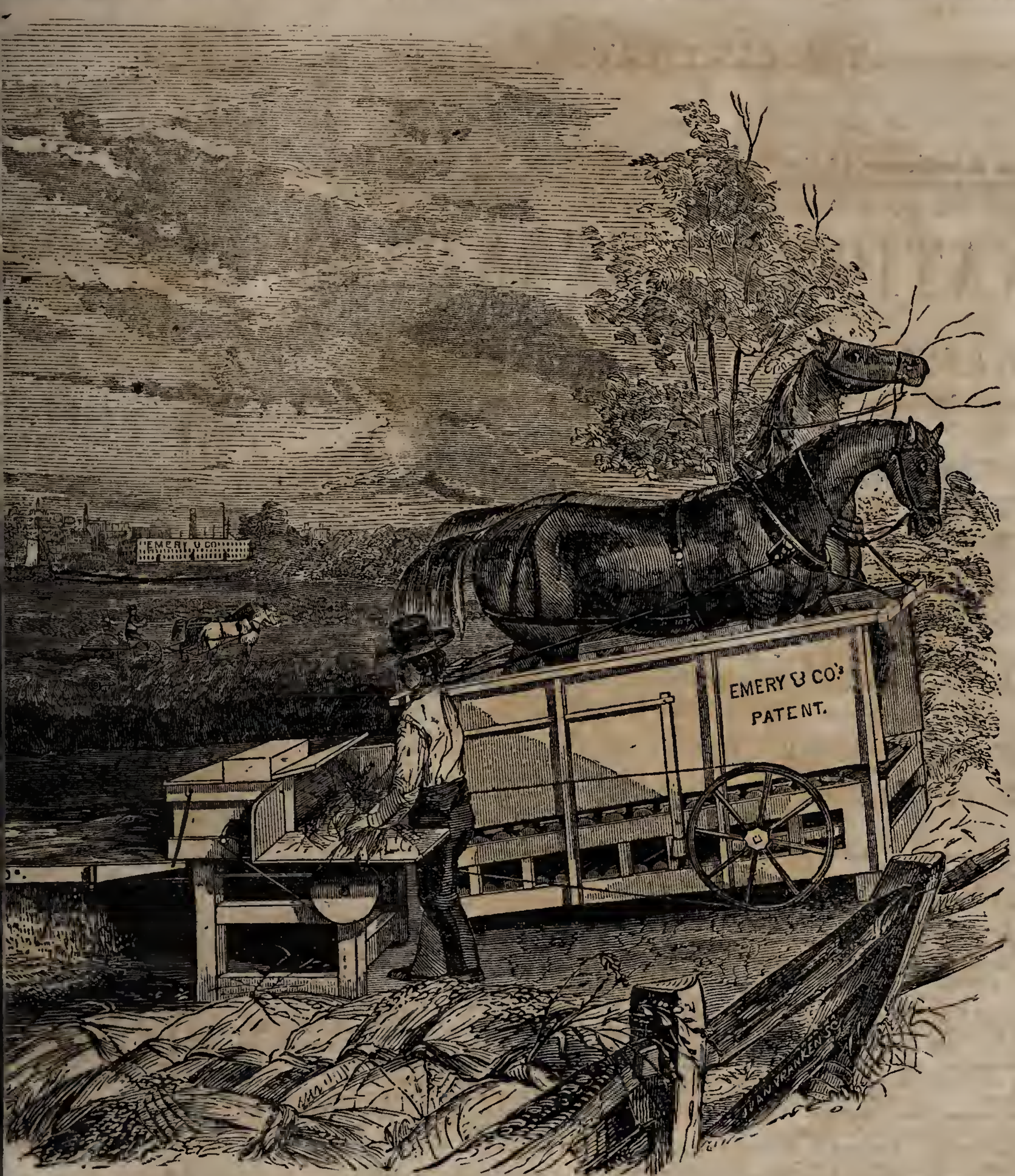
During the past two years, we have sold nearly one thousand setts of these *Improved* Powers, with Threshers; and without exception, they have given uniform satisfaction, not one having been returned, notwithstanding our warranty is broad and liberal. They have been exhibited at all the principal Fairs throughout the country, during the autumn of 1850, and again in 1851, and with but two exceptions in the whole number of exhibitions, they were awarded the Highest Premiums—and in both these cases, before the patterns were as perfect as now; and the workmanship, in both having been done for us by contract, before we were enabled, with our facilities, to do all ourselves. In these instances, our Powers were entirely new, and not made with any view of exhibition—while those Powers receiving the premiums were made and finished up in all the working as well as other parts, with especial reference to competition at Fairs. In the one case, our Power has since established its superiority over its competitor, by receiving the Highest and only Premium in 1851, and in competition with the same Power, and at the hands of the same Society, the majority of whose awarding committee owned and were using the competing Power which received the award in 1850—giving our own the preference for its superior construction, ease for team, and efficiency: And in the other, we pledge ourselves to the public that it will do the same thing at their next Annual Fair, provided ***pecuniary interest*** or ***personal prejudice*** is not allowed to enter into the merits of the question.

Among the many Premiums awarded us for this Power, are the following:

AT THE FAIR OF THE NEW-YORK STATE AGRICULTURAL SOCIETY AT ALBANY, IN 1850, the committee unanimously awarded us the Highest and only Premium on the endless-chain Power, and in competition with three others—among which was the Wheeler Railway Power, made and entered by themselves, (the same as we have extensively manufactured and sold for several years.) The chairman of the awarding committee says of the machines as follows: "We spent much time in examining the various Powers, first "with the owners, and heard all they could say, and then in their absence, an "the result most fully convinced me that yours was the best; and if I wante "one, I would give twenty dollars more for yours than for any other on th "grounds:" And on being written to, some months afterwards, concernin the same, he replies that—"As you have won your laurels fairly, it is just yo "should receive a full reward."

IN 1851, AT THEIR FAIR HELD AT ROCHESTER, the same Society's committee (than whom no men, better qualified, or attention and care bestowed durin the whole four days of the Fair, have been or can again be secured,) awarde us the Highest and only Premium, for the best Rail Road Horse Power, an in competition with the same Powers as at Albany. The committee say, i their report, that "The contest was the closest between Wheeler's an "Emery's—two manufacturing firms from Albany; but owing to the similarity of Powers, they were required to give a test by threshing one hundre "large bundles of wheat; and notwithstanding Wheelers' beat Emery's b "three minutes, we are of the opinion that, as a whole, Emery's Rail Roa "Horse Power is entitled to the Premium."

This report of the committee being in favor of our Power, and with thi difference in the results, if the superiority of its construction and operation i not established, it certainly will be, when we state that during the three day previous, at said Fair, with an entirely new Power, (borrowed for the occasion of Hon. J. M. Sherwood, of Auburn, to whom it was sold some weeks before in exchange for one of Wheeler's manufacture, but not yet used,) lighter horses, and little used to working it, we repeatedly threshed, of the sam lot of wheat, one hundred sheaves in ten minutes, at the same elevation, an with but two-thirds the travel of the horses, required by the Wheeler Power to do the same work; while the team used by them were following threshin with and well broke to their Power, and their Test Power made expressly for and having been previously used at several Fairs, and in good working order



D LATEST PREMIUM RAIL ROAD HORSE POWER.

OMPANY,

ATENT RAIL ROAD HORSE POWER (PATENTED FEBRUARY 24, 1852);

rehouse and Sale Rooms, Nos. 369 and 371 Broadway,

N. Y.

Again, we would say, that in the test where there were but seventy-nine eaves (instead of one hundred, as erroneously stated by the committee, in eir report,) we were required, much against our convictions of justice, to it off our team, and use in our turn the very team from the other Powers, id that after doing the other's work, and wholly unused to working our slow ower, requiring their owner at their heads to keep them back, and from alking overboard, as they were inclined to do—no harness being used; there- disadvantaging us to the extent of eleven minutes with the seventy-nine eaves, or a little over seven sheaves per minute, instead of ten, as we had peatedly done with our own team. These facts, together with those of the oneave and Bonnet of their Thresher being raised for the test; also, that of eir Power *slipping its gear, flying its band, stopping them nearly ten minutes* repair, in the middle of the test, (which was allowed by the committee, ereby reducing their working time to eight minutes, or nearly ten sheaves per inute, just equal to our ordinary work during the whole Fair,) we think ould conclusively settle the question of superiority: and we hazard nothing saying the committee will not deny one of these statements. We may here mark, that we consider the published report imperfect, and that justice to the mmittee as well as ourselves, requires the publication of these facts.

At the Fair of the Michigan State Agricultural Society, in 1850, e received Twenty Dollars for the largest and best collection of Implements; so, a Diploma for our Horse Power. The Premium of Ten Dollars being varded the Wheelers' Power.

In 1851, at the same Society's Annual Fair, we were again in com- tition with the same Power, and were unanimously awarded its Highest and ly Premium, being Ten Dollars and Diploma, (and this, too, at the hands of committee, the majority owning and using the competing Powers on their ms,) for superior construction, efficiency, and ease for team—thus redeem- its reputation from the effects of the adverse decision of the previous year.

At the Fair of the Ohio State Board of Agriculture, in 1850, we were again in competition with the Wheeler Power; and each received a like Discretionary Premium, being a Silver Medal and Diploma—the First and only Premium being awarded to a Lever Power—Taplin's Patent.

At the Fair of the same Board of Agriculture, in 1851, a like competition, with similar result—the only Premium being awarded to the same Lever Power as before.

At the Fair of the State Agricultural Society of Pennsylvania, in 1851, (being their first Fair,) we were awarded a Diploma for superior Rail Road Power—the First and only Premium being awarded to a Rack and Pinion Railway Power made within that State, which was more perfectly fitted and finished in all its running parts than any similar implement ever publicly exhibited, working with the least possible friction—while our own was made as usual, and never used for threshing twenty bushels of grain before being exhibited at this Fair. We shall again try our chance the coming season, and hope to succeed in sustaining the good name there which it enjoys elsewhere.

At the Fair of the American Institute, in 1851, we were awarded the only Premium, their "Gold Medal," for our Power, competing with others.

At the Provincial Fair held at Niagara, (Canada West) in 1850, we were awarded a gratuity of Ten Dollars and a Diploma for our Power, on exhibition with the Wheelers and others—the First Premium not being awarded out of the Provinces, but to a manufacturer in Montreal.

At the same Provincial Fair, in 1851, we did not compete at all—the Wheeler Power alone being exhibited from the States.

Our Power has also been exhibited at nearly all the County Fairs of this and several other States, during the past two years, and in no case where they have been entered for competition and a premium awarded to any one, have ours failed to receive the award; while numerours premiums and awards have been received wherever they have been exhibited.

“Best Dictionary of the English Language.”—*London Morning Chron.*

A NATIONAL STANDARD.

WEBSTER'S QUARTO DICTIONARY,

The Entire Work Unabridged, 1456 Pages, Crown Quarto, Six Dollars.

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WEBSTER'S ACADEMIC DICTIONARY, - - - -	1 25.
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WEBSTER'S PRIMARY SCHOOL DICTIONARY, -	0 45.
WEBSTER'S ELEMENTARY SPELLING-BOOK, - -	0 10.

Forming a Complete Series, and affording a NATIONAL STANDARD, thus securing Uniformity of Orthography and Pronunciation for the millions that are to constitute this vast Republic.

OF THE SPELLING-BOOK ONE MILLION COPIES ARE SOLD ANNUALLY.

The leading Series of School Books published in this Country, are based upon Webster's System.

⁂ There is no other acknowledged Standard in this country or Great Britain; and the following, among many others, show the views of prominent gentlemen through the country, on this subject:—

“We rejoice that it bids fair to become the STANDARD DICTIONARY to be used by the numerous millions of people who are to inhabit the United States.”—*Signed by* 104 *Members of Congress.*

“We recommend it to all who desire to possess THE MOST COMPLETE, ACCURATE, AND RELIABLE DICTIONARY OF THE LANGUAGE.”

DANIEL WEBSTER, LEWIS CASS, THOMAS H. BENTON, and thirty other members of the United States Senate. MILLARD FILLMORE. THEODORE FRELINGHUYSEN, Chancellor of University of N. York. WILLIAM H. CAMPBELL, Ed. N. Y. Dist. School Journal. GEORGE N. BRIGGS, Gov. Massachusetts. WILLIAM B. CALHOUN, Sec. of State, Massachusetts. RICHARD S. RUST, Com. Common Schools, N. Hampshire. THEODORE F. KING, Sup. Schools, N. Jersey. ROBERT C. WINTHROP, Speaker U. S. House of Rep. EDMUND BURKE, Com. Patents. JOHN YOUNG, Gov. New York. CHRISTOPHER MORGAN, Sec. State & Sup. Com. Sch. N. York. ALVAH HUNT, Treas. N York. Rev. SAMUEL H. COX, D.D. LYMAN BEECHER, D.D., Pres. Lane Seminary. CALVIN E. STOWE, D. D., Prof. do. Rev. HEMAN HUMPHREY, D. D., late Pres. Amherst College. Rev. EZRA KELLER, D. D. Pres. Wittenberg College, Ohio. M. A. DIEHL, Prof. in do. N. A. GIEGER, Prof. in do. BENJAMIN LABAREE, D. D. Pres. of Middlebury College; and other distinguished gentlemen.

GOV. WOOD, *of Ohio, in his Annual Message, January* 1852, *remarks:*

“It is admitted to be the most valuable work of the kind extant, by the learned men both here and in Europe; and its general use in our schools would break down all provincialisms, so to speak, and produce uniformity and elegance in the use of our language. Words would then be used by every one in the same sense in which they are defined by that able lexicographer.”

GOV. EATON, *of Vermont:*

“I had the gratification of seeing WEBSTER'S DICTIONARY adopted as the STANDARD DICTIONARY for the Schools of Vermont. I was gratified—because I felt that this work was worthy *to be a Standard;* that it afforded a safe harbor after long tossing upon a sea of doubt and uncertainty;—a secure resting place from the fluctuations to which our language has long been subjected, and to which, *without* this work, it would still, as much as ever, be exposed.”

HON. F. W. SHERMAN, *State Superintendent of Schools in Michigan:*

“This work has been adopted as the STANDARD DICTIONARY in the schools and colleges of most of the States of the Union; and State officers in charge of the system and subject of Education, in various States, have recommended appropriations for its purchase by the legislature.”

SECRETARY MORGAN, *of New York:*

“As a STANDARD of orthography and orthoepy, its claims to general adoption have been recognized by the most eminent scholars and statesmen of our land; and as a purely American work, prepared at great expense, and emanating from a source entitled to the highest credit and respect, it commends itself strongly to the adoption of our School Districts generally.”

PROFESSOR STOWE, *of Cincinnati:*

“The STANDARD, wherever the English language is spoken, it deserves to be, must be, is, and will be.”

☞ Dr. Webster's Educational Books are believed by intelligent judges to have done more than any other cause whatever, to secure that freedom from provincialisms, and uniformity in the pronunciation and use of language, so remarkable in the United States, especially considering the great and constant influx of foreign population.

☞ Gentlemen interested in popular education, Superintendents, Teachers, Parents, and others, are respectfully invited to consider the adaptation of Dr. Webster's Series of Dictionaries, &c., above mentioned, to secure and perpetuate this desirable uniformity.

1852. **SOLD BY ALL BOOKSELLERS.**

“Most Complete, Accurate, and Reliable Dictionary of the English Language.”—*Thirty Members of United States Senate.*

“A Mine of Philological Wealth.”—*Wm. Russell, Esq.*

“Get the Best—the Great Work, Unabridged.”—*Phren. Jour.*

“A Noble Monument of Erudition.”—*London Literary Gaz.*

EMERY & CO'S

OVERSHOT THRESHING MACHINE, WITH Vibrating and Revolving Separators.

The above Threshers have been extensively manufactured and sold by us for the past six years, and with a steadily increasing demand. During the two years last past, and with our latest Improved Rail Road Powers, their sale has more than doubled over the same length of time before.

Although over two thousand of these Threshers have been sold by us up to this time, and without exception have given the fullest satisfaction as heretofore made, we can safely say they are, as now made, worth at least fifty per cent. more than heretofore, and without any increase in prices being charged for them.

Their construction is such that the grain and straw are carried by the cylinder from a level feeding table, over and between it and the concave, which is placed above instead of below as is generally done in others. The cylinders being 26 to 30 inches long, and 14 inches diameter, are much longer but smaller than those generally in use—giving more room for feeding, in proportion to work done, and doing it nearer the centre of motion, and working easier, as the smaller the diameter the greater the power. Again, we require but about half the number of spikes in the cylinder, and an increased motion, so that the spikes may pass through with a velocity sufficient to take off all the grain.

The concaves have an increased number of spikes, which for both cylinder and concave are swedged into uniform shape and size, from the best Swedes Iron. They are set with an inclination which admits the straw and grain to pass freely, and with as little breaking of the straw as is consistent with a perfect separation of the grain—thus producing a sort of stripping or carding process. The concave is so confined as to be readily adjusted and present any desired angle of the spikes to the grain, and also increase or decrease the capacity of the throat, thereby retaining the straw a longer or shorter space of time in passing, as the condition and kinds of grain may require. By this arrangement, there is a saving of power of from 30 to 50 per cent. over the ordinary Threshers, whose spikes pass each other at right angles, which operation necessarily breaks the straw into many pieces at the expense of much power—a process much more easily done with a good hay cutter with sharp knives, than with the rounded edges which well formed spikes present to the straw. The feeding-table is level, allowing the feeder to stand upright and be little annoyed by dust, dirt, &c.; the over-shot motion avoids accidents to men or machine, (by preventing any stones, sticks, &c. getting into it in feeding,) which frequently occur with the inclined feeding board. The grain by this motion is elevated sufficiently to be thrown upon a large seive or separator, where it is separated from the straw and falls through upon the ground or floor, together with the fine chaff, dust, &c, while the straw is discharged at the end of the separator, ready for stacking or binding.

The Shafts of our cylinders are made of solid cast steel, manufactured and imported for us expressly for the purpose; and all the boxes or bearings are made of or lined with Babbet metal. The boxes used by us are always of two parts, in order to be adjusted as they may wear, or to vary the position of the cylinder, as well as to allow them to be removed, if necessary for cleaning or repair, without removing the pulleys or other parts of the machine. This is an important advantage over those boxes which are made of a sort of tube, and only removed by first removing the pulleys, &c. &c. and are never adjustable to accommodate themselves to any wearing.

The Pulleys are polished and fitted to both ends of the shaft and confined by nuts and screws, and with our India rubber band which we invariably use, form a perfectly air-tight connection; thereby bringing the atmospheric pressure to our aid, and preventing any slipping of the band. A band of this kind, say 30 feet long and 3½ inches wide, will drive equally strong when four inches looser than if made of leather. This kind of band requires little care, compared with leather, is equally pliable in all temperatures, and is not affected by dryness or wet, grease, acid or dust. It is made with but one joint and that smoothly cemented and copper riveted, and is equally durable for straight bands as leather, the difference in cost being a little in favor of India rubber. The chief advantage of using these bands, is causing less stress upon the shafts, allowing them to run with less friction and wear on both shafts and boxes.

CLEANER AND THRESHER, COMBINED.

During the past three years we have spared neither time or money in endeavoring to produce, at one and the same time, a CLEANING THRESHER, which will perform as well and rapidly as our Thresher and Separator, with the same force of men and team to operate it, while the increased cost of such combination should not exceed the value of a good farming mill, (say 25 to $30.) During the past two seasons we have succeeded to our entire satisfaction in all respects excepting cost of construction, the increased expense of manufacturing being some fifty to seventy-five dollars, and bringing the price fully up to that of Pitts' celebrated Patent Thresher and Cleaner, which has been extensively and favorably known throughout the whole country for the past fifteen years; and when adapted for two horses, well made, and driven by our two horse power, will do as well as any now in use, our own not excepted, setting aside perhaps something in quantity of work done.

The great excess of the demand being for our Threshers and Separators instead of Cleaners, we are compelled to confine ourselves and facilities chiefly to the former, making Cleaners only to order, and at the price of one hundred dollars each instead of seventy-five as heretofore advertised by us.

From our own observations, and the slow adoption of the Cleaner combined, when used by farmers with barns and for their own purposes, we would not recommend them on the ground of economy, as the grain can generally be threshed better and faster with the Separator; and the simplicity of the one as compared with the other, together with the difference of skill required in those attending both kinds, is vastly in favor of the Thresher and Separator. Those farmers using their straw for feeding, or selling in market, find it much more valuable when threshed with the Separator. It is entirely free from the dust, dirt and fine chaff which is mixed thoroughly through the whole mass by the current of air thrown from a Cleaner.

In field threshing and where time is of the greatest consideration, and there is risk from exposure to weather, the straw of little value, large Cleaners, with more men and horses, are often preferable.

We have received many complimentary letters concerning our Thresher and Separator, and in every instance where both have been used the preference for economy has been given the Thresher and Separator for farmers own use.

We cannot better express the general feeling among the farmers concerning the relative advantages of Threshers and Separators, and Threshers and Cleaners, than by giving Extracts from several correspondents who have seen and used both.

Extract from letter of Russel Kilbourne, *of Paris Hitl, N. Y.*

"Sirs,—Since the first two hundred bushels of wheat threshed with your latest improved Rail Road Horse Power and Threshing Machine and Separator, they have performed well. Two or three farmers, neighbors near me, desire machines for their own use: how soon can you ship them after they are ordered, and can you sell them any less on account of the lateness of the season? I wish very much to sell two or three of them here, if possible, not only because I think the purchasers would be better pleased with them, but because Mr. Osborn, Wheeler's agent, and who has one of Wheeler's Two Horse Power Threshers and Winnowers here, is determined that none of yours shall be sold if he can prevent it."

In a subsequent letter, he again writes us, "The more I see of Wheeler's Power and Winnower, the more I don't like it They can thresh just about seventy-five bushels of first rate wheat per day."

Extract of Letter from Wm. H Chalmers, *West Galway, Sar. Co.*

"Gentlemen,—I have a small team, and, with moderate elevation, and without their drawing in harness, I put through large sheaves of wheat at the rate of one hundred every ten minutes, threshing it thoroughly. Much more could be done for a short time; but I mean with the elevation and labor of team as I use in following threshing. I firmly believe your improved Power Thresher and Separator will supersede anything I have seen Many farmers prefer the Thresher and Separator to the Winnowers, as grain can be threshed faster and better without them—requiring less men, thereby saving sufficient time for cleaning with a good Fanning Mill. I have seen one of Wheeler's Horse Powers, with Thresher and Winnower, at work here, threshing but one quarter as fast as I do with your machines. An Eight Horse Power, with Thresher and Cleaner, working in this vicinity, requiring twice as many men, is pronounced, by those taking away the straw from both, to thresh less per day than mine. I wish you to write me if you have made any improvements since mine, and have you Powers, &c, on hand, as I expect to sell some."

Extract from letter of Peter Webber, *Herkimer, Feb. 3d*, 1852.

"Gentlemen,—After giving your improved Horse Power Thresher and Separator a thorough trial, I consider it superior to any I have seen or tried: it works to my perfect satisfaction. I had given the others a trial before ordering yours, but was dissatisfied until I saw yours operate. I feel a pleasure in recommending it to farmers in general as being well made, and as having no equal in arrangement, power or workmanship."

Extract of letter from W. D Mason, *Jefferson, Ohio, Nov.* 30, 1851.

"Gentlemen,—I write to know your terms for your Improved Rail Road Horse Power. I enclose a copy of Wheeler's, which I received from his agent; and if yours come near the same, you may consider this an order for one, for which I will remit as soon as I get your answer. I have tried Wheeler's Power at the request of his agent, but find the friction so great upon the pinions that it causes me to think it cannot be a lasting power."

Extract from letter of J. N. Rottiers, *Lafargeville, Jeff. Co., N. Y.*

"Dear Sirs,—Your last set of Improved Horse Power Thresher and Separator has safely arrived, and in the best condition. The whole have given the best of satisfaction, and are the admiration of every one. The Saw Mill has not been tried, but presume will prove as good as the other labor saving implements made at your establishment. Wheeler, Mellick & Co.; of your city, advertise a Thresher and Cleaner, and recommend it for speed and simplicity. I should like to have your opinion of its merits, knowing as I do that you are always ready to give everything its due."

For further testimonials concerning the utility and superiority of our Threshers and Separators, and also our Improved Rail Road Horse Powers, we refer the public to the following persons from among the many to whom we have recently sold them, and taken in exchange the Wheeler Powers, Threshers, &c., at a discount in favor of our own, of from five to fifty dollars each; and in nearly all cases, they are being used for public threshing.

Hon. J M. SHERWOOD, Auburn, N. Y.;
JNO. McD. McINTYRE, Esq., Albany, N. Y.;
JNO. N. ROTTIERS, Esq, Lafargeville, Jefferson Co., N. Y.;
H. L. STEWARTS, Root, Albany County;
JACOB LANSING, Greenbush, Rensselaer County;
REUBEN YOUNG, Berne, Albany County;
GEORGE L. HAYNES, Fultonham, Schoharie County;
——— SMITH & CO., Canajoharie, Montgomery County;
——— DETMAR, Canajoharie, Montgomery County;
——— DEIVENDORF, Fort Plain, Montgomery County;
E. STILWELL, Fort Plain, Montgomery County;
COOPER & WOODRUFF, Watertown, Jefferson County;
JNO. A. DUNN, (Saratoga and Whitehall R. R.,) Saratoga;
JOHN POST, Boonville, Oneida County, N. Y;
ELA MERRIAM, Leyden, Lewis County, N. Y.;
J. C. COLLINS, Constableville, Lewis County, N. Y.

WM. R. PRINCE & CO., Flushing,

Offer the following Trees:

PEARS.—An immense number of all sizes, from 2 to 8 years, grafted—including standards, and Pyramids on Pear and Quince. Of these about 8,000 are very large, and in a bearing state.

APPLES, *Cherries, Plums, Apricots, Peaches and Quinces*, of all sizes, including several thousand of extra large size, suitable for immediate bearing. *Evergreen Trees and Shrubs*, and other *Ornamental Trees and Shrubbery*, of extra large sizes for prompt ornament to Cemeteries and Pleasure Grounds. Also, an immense stock of *Evergreen Trees and Shrubs of smaller sizes, for Nurseries*, and far surpassing any other in extent; and these are grown from seeds, and have been transplanted and established—and incomparably superior to the trash collected from the forests.

10,000 DWARF OR PYRAMID CHERRIES, on the Mahaleb stock.

STRAWBERRIES.—A collection altogether unrivalled, and which amateurs are requested to inspect the fruit of in June.

Arborvitæ and other Evergreens, and Osage Orange, and Washington Thorn, for hedges.

Cherry, Plum, Pear, Apple, Angers Quince, and other stocks, for Nurseries.

Osier Scions of the 5 best varieties, for basket work, &c.

Spring Hill Pippin, a superior seedling of the Newtown Pippin, $10 per dozen. Spring Hill Spitzenberg, a fine seedling of the Esopus Spitzenberg, $10 per dozen. Queen of August Pear, new American; very large—melting and delicious, $6 for six. A large collection of Greenhouse plants of all kinds, for sale low to close up.

Of Roses the largest collection—comprising all the new and choice varieties of every class, with a stock of Tree Roses, 4 to 8 feet in height.

Above 130 splendid double varieties of Herbaceous Pœnies, and 60 splendid varieties of Tree Pœnies, comprising above 5,000 plants. A splenpid collection of California Trees and Plants.

All the choicest Foreign and Native Grapes; the finest Figs, Raspberries, Currants, Gooseberries and Rhubarb. The finest new Dahlias, Geraniums, Fuchsias, Verbenas, Large and Lilliputian Chrysanthemums, Verbenas, and Phlox. Japan and other Lilies, Calochortus, and a general assortment of Bulbs.

Priced Catalogues, as follows, sent to post-paid applicants enclosing postage stamps.

No. 1. Fruit and Ornamental Trees, Shrubs and Plants. No. 2. Roses, 1,600 varieties, and Supplement. No. 3. Extra large Fruit and Ornamental Trees, &c. No. 4. New and rare Trees and Plants. No. 5. Wholesale Catalogue for Nurseries. April 1—It.

LEWIS G. MORRIS'

Third Annual Sale, by Auction, of

IMPROVED BREEDS OF DOMESTC ANIMALS,

WILL take place at MOUNT FORDHAM, Westchester Co., (11 miles from City Hall, New-York,) on WEDNESDAY, JUNE 9, 1852. JAMES M. MILLER, Auctioneer.

Application need not be made at private sale, as I decline in all cases, so as to make it an object for persons at a distance to attend. Sule positive to the highest bidder, without reserve.

Numbering about fifty head of Horned Stock, including a variety of ages and sex, consisting of *Pure Bred Short-Horns, Devons, and Ayrshires; South Down Buck Lambs*, and a very few *Ewes; Suffolk and Essex Swine.* Catalogues, with full Pedigrees, &c., &c., will be ready for delivery on the first of May—to be obtained from the subscriber, or at the offices of any of the principal Agricultural Journals or Stores in the Union. This sale will offer the best opportunity to obtain very fine animals I have ever given, as I shall reduce my herd lower than ever before, contemplating a trip to Europe to be absent a year, and shall not have another sale until 1854.

It will be seen by reference to the proceedings of our State Agricultural Society, that I was the most successful exhibitor of Domestic Animals at the late State Fair.

I will also offer a new feature to American Breeders—one which works well in Europe; that is, *letting* the *services* of *male animals;* and will solicit propositions from such as see fit to try it. CONDITIONS.—The animal hired will be at the risk of the owner, unless by some positive neglect or carelessness of the hirer; the expense of transportation to and from, to be borne jointly; the term of letting to be one year or less, as parties agree; price to be adjusted by parties—to be paid in advance, when the Bull is taken away; circumstances would vary the price; animal to be kept in accordance with instructions of owner, before taking him away.

I offer on the foregoing conditions, three celebrated prize Bulls—"MAJOR," a Devon, nine years old; "LAMARTINE," Short-horn, four years old; LORD ERYHOLME," Short-horn, three years old. Pedigrees will be given in Catalogues.

At the time of my sale, (and I would not part with them before) I shall have secured two or three yearly setts of their progeny; and as I shall send out in August next, a new importation of male animals, I shall not want the services of either of these next year. I would not sell them, as I wish to keep control of their propagating qualities hereafter.

I also have one imported Buck, the prize winner at Rochester last fall, imported direct from the celebrated Jonas Webb; and also five yearling Bucks, winners also, bred by me, from Bucks and Ewes imported direct from the above celebrated breeder; they will be let on the same conditions as the Bulls, excepting that I will keep them until the party hiring wishes them, and they must be returned to me on or about Christmas day. By this plan, the party hiring gets rid of the risk and trouble of keeping a Buck the year round. All communications by mail must be prepaid, and I will prepuy the answers.

Mount Fordham, April, 1852—3t. L. G. MORRIS.

Albany Drain Tile Works.

No 60 Lancaster Street—West of Medical College, Albany.

THE subscriber has now on hand, Draining Tile of the following descriptions. Prices reduced.

HORSE SHOE TILE.

5½ inch Rise,	or 4½ inch Calibre,............	$18 00 pr. 1000.
4½ "	" 3½ "	15 00 "
3½ "	" 2¾ "	12 00 "

SOLE TILE.

4½ inch Rise,	or 3½ inch Calibre,............	$18 00 pr. 1000.
3½ "	" 2¾ "	12 00 "

These Tile are over one foot in length, and are so formed as to admit water at every joint, draining land from 12 to 20 feet each side of the drain—being the cheapest and most durable article used.

Tile sufficiently large for drains around dwellings, at $4 and $8 pr. 100 pieces. Orders from a distance will receive prompt attention.

Albany, April 1, 1852—tf. JOHN GOTT.

Valuable New Work for Farmers.

THIS day is published, by G. P. PUTNAM, New-York, WALKS AND TALKS OF AN AMERICAN FARMER IN ENGLAND. With Illustrations. Forming volume three of Putnam's Semi-Monthly Library. Price 25 cents.

A narrative of an American Farmer, who has incorporated with an interesting account of personal adventure and description of rural life in England, much valuable agricultural information, with a careful analysis of those peculiarities of climate and social condition which affect the practicability of introducing recent English improvements into the United States.

Extract from the Author's Preface.

"I have most desired to bring before my brother farmers and their families, such things that I saw in England as have conveyed practical agricultural information, or useful suggestions to myself; and such evidences of simply refined tastes, good feelings, and enlarged christian sentiments among our English brethren, as all should enjoy to read of."

Recently Published—Putnam's Semi-Monthly Library, of Standard and attractive Works, for Travellers and the Fireside.

The First Volume—HOME AND SOCIAL PHILOSOPHY: From Household Words, by Charles Dickens.

The Second Volume—WHIMSICALITIES: by Thomas Hood.

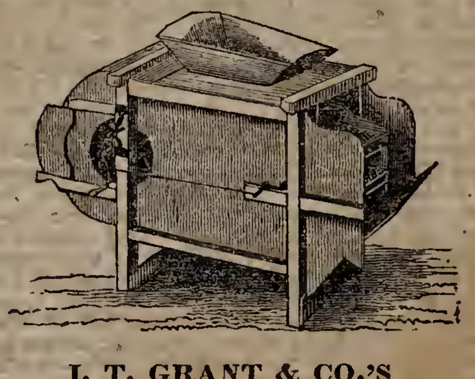
"Useful and economical volumes for the million."—[*Boston Gaz.*

"Admirably adapted to alleviate the tedium of a journey, or to amuse a vacant hour at home."—[*Boston Traveller.*

"The plan is a good one, and will, beyond doubt, prove in the highest degree successful."—[*Troy Whig.*

"It cannot be too highly commended. It is adapted to readers of various tastes and ages."—[*Mirror.*

"Books which bear the wear of half a dozen readings, and then be worthy of good binding and a place upon the shelves."—[*Cour. & Enquirer.* New-York, April 1—2t.



I. T. GRANT & CO.'S

Agricultural Warehouse and Manufactory,

Junction, Rensselaer co., N. Y.

THEY have received the greatest number of Premiums that have ever been awarded to any Fan Mills and Cradles in the United States. Eight first premiums of Silver Medals at the great Fair of the State of New-York. Four silver medals at the great Fair of the American Institute, New-York. Also, Premiums at the Pennsylvania State Fair, Maryland State Fair, Michigan State Fair, and Ohio State Fair. Seven first Premiums at the Rensselaer County Fair, and twenty-five at other county Fairs. They have always taken first Premiums, and stand before the Public pre-eminent.

This is the Oldest Establishment known to the subscribers in this country. Believing that we have kept up to the day of improvements, that Farmers and Planters can rely upon getting the best when they purchase

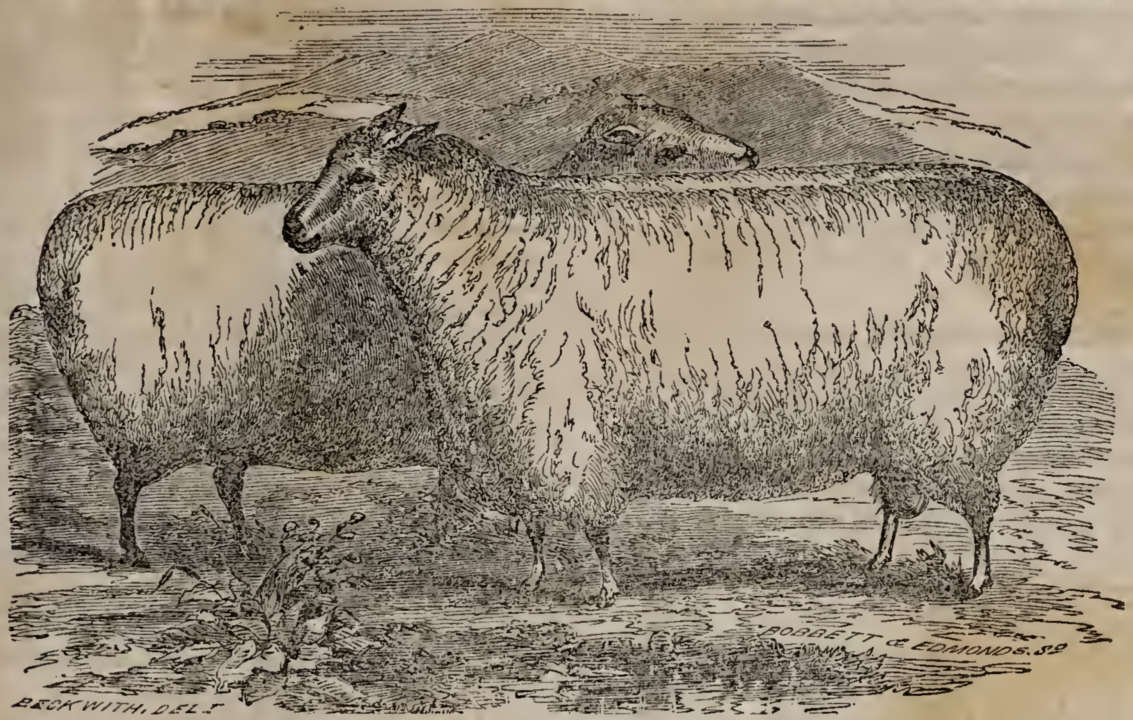
GRANT'S PATENT FAN MILLS AND CRADLES

of us, at the lowest price, (and warranted) that we hope still, as heretofore, to receive a liberal share of their patronage.

Also, a general assortment of the most approved kinds of Agricultural Implements, in all their variety, such as Straw Cutters, Churns, Corn Shellers, Ox Yokes, Eddy & Co.'s Wrought Iron Beam Plow; Horse Hay Rakes, and all kinds of Harvesting and Haying Tools.

At Junction P. O., 8 miles north of Troy, N. Y., on the Troy and Boston Railroad. I. T. GRANT.

April 1—2t. D. H. VIAL.


BECKWITH, DEL.
BOBBETT & EDMONDS, SC.

Long-wooled ram and ewe, which received the first premium for stock over two years old, at the Show of the New-York State Agricultural Society, 1851. The ram belonged to J. **McDonald**, Warren, Otsego, Co., N. Y., and the ewe to **Williams Rathbone**, Springfield, in the same county.

droves, and well matched. At three years old, they will do as much work as a common span of horses, and continue to improve for ten years. It appears to me that farmers might save much by substituting mules for horses.

I suppose that in the United States there are three millions of working horses, whose place might be equally well supplied by mules. In my estimate, I made the balance in favor of the mule over $50 yearly; but allowing it to be only $20, the annual saving of expense would be sixty million dollars. Yours truly, D. D. T. More. *Watervliet, N. Y., Feb.* 1852.

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Management of Bees.

In a short article on bees in the January number, I stated that I use Weeks' Vermont hive. Many patterns of hives are now in use, each of which, no doubt, has its excellencies. It is not my purpose to decry any of them. I shall speak of the one I have used, and which has done me good service. As I write to encourage a more extensive cultivation of bees, so that every family residing in the country, may at least provide, at a cheap rate, sufficient honey for its own consumption, I will give some familiar hints on the mode of management, which, in an experience of some ten years, I have found successful.

Let me premise, that every person, whether male or female, who has strength to carry to its place a hive containing a new swarm of bees, can readily become a bee manager. I have had in my employ, a female who could hive a swarm as skillfully and composedly as myself. The fear of being stung is what deters most persons from attempting to keep bees. It is, however, an easy matter to provide against them. I never expose myself to their displeasure unprotected. A pair of thick woolen mittens and a veil made of a yard of bobinet lace, formed into a sack and drawn over the head, will render one entirely safe among them. The most timid person, who will make the trial of going among bees thus equipped, will soon be rid of his fears, and will find them the most harmless and agreeable stock he has ever attended. A successful bee-keeper can hardly fail to become enthusiastic in his attachment to his colonies of industrious little honey-gatherers. He is charmed with the thought that such myriads of winged insects are so entirely at his control and subservient to his interest, storing up with consummate skill, one of the richest luxuries of his table.

Addressing myself to one desirous of commencing the culture of bees, I would say, procure and read attentively a copy of the latest edition of Mr. Week's book on the management of bees. It is eminently a practical work, composed by one long used to the business. For a time you will hardly dare to do all he recommends, but gradual familiarity with your new laborers will inspire confidence, and careful observation will initiate you into the nature and degree of attention you will need to bestow on them. Obtain the right to use the hive; then purchase four swarms, already in such hives if possible; or make some hives, and have new swarms put into them at the time of swarming, by some neighbor who keeps bees. Put only four hives on a frame thirteen feet long. Make the hives of inch and a quarter pine plank, and paint them white, to guard against warping, and the influence of extreme temperatures. Make your boxes half the size of the chamber, having the sides and front entirely of glass, with ten holes for access from below, instead of four, thus equalizing the temperature and inviting the bees to commence much earlier to fill the boxes. White honey in this latitude is all gathered before the middle of August, and it is desirable to secure as much as possible of this for use.

When a swarm comes out, observe where it settles; put on your defenses, set your hive near the front, elevated an inch, hold a tin pan close under the bees and with a table brush, gently detach a portion of the swarm filling the pan, pour them *very gently* at the front of the hive and fill your pan again, until all are brought down. Apply your brush occasionally to keep the passage into the hive open, and in half an hour or less all will be in, and ready to be hung upon the frame. If a ladder is needed, the same process is pursued with a little more laror. Pass quickly down with your pan full, lest all be on the wing, when you will need to wait till they again alight. H. W. Bulkley. *Ballston, N. Y., Feb.* 11, 1852.

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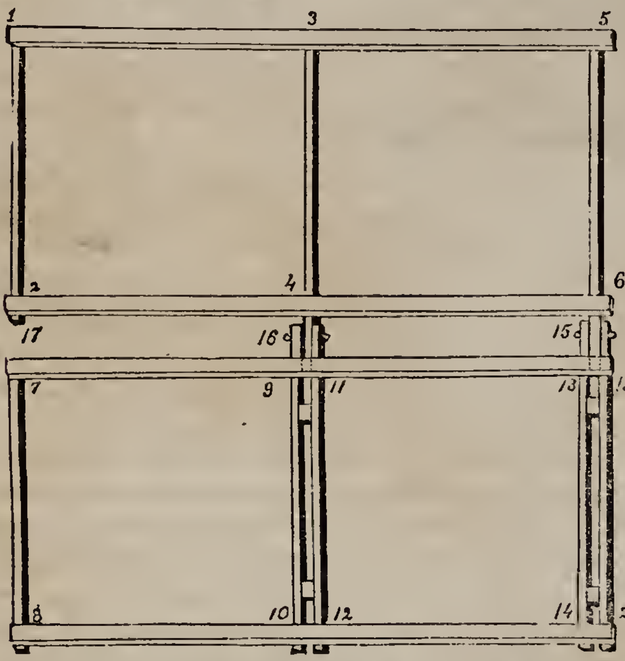
Plan of a Curculio Catcher.

Facts and figures showing that the Curculio can be certainly, safely, and cheaply resisted.

Eds. Cultivator—In the Cultivator for March, 1850, p. 110, I briefly suggested the plan of a curculio catcher. Within a few weeks after the penning of that article, the machine, of which the above is a plan, was made. Having used it, with success, for two years, I send you a drawing and description of it. It is made of strips of board, cloth, and nails. The timber which I use is bass-wood, which is light, strong, pliant, and takes nails well. The timber is all of one size, two inches wide, and about three-fourths of an inch thick. The machine consists essentially of two frames, each about nine feet long and four and a half wide, fastened in the centre by two hinges, (as they may be called,) and is covered with cheap and strong cotton cloth, nailed in with small tacks, a little smaller than those commonly used for carpets.



The whole may be shut together like the cover of a book, but not quite so closely, owing to the shape of the hinge.

For very large trees this is too small a machine, while for very small ones it is quite large.

The short pieces, (1, 2, 3. 4, &c.,) are the foundation. They are marked by two lines, drawn near together, indicating that they are set on the edge. Small blocks are inserted below 9–11 and 13–19, and between 10–12 and 14–20, to keep the two parallel pieces apart, so as to admit the pieces 3, 4, and 5, 6, from the other half of the frame, to lie between, act as hinges by the use of a peg or nail at the points 15 and 16. No hinge, or other connection, is allowed at the point 17, as that would fill up the space left for the admission of the tree. These first or short pieces are set or laid on the edge, rather than flat, the better to make a firm hinge. Across these foundation pieces lay the other and larger ones 1–5, 2–6, 7–13 and 8–14, nailing them carefully and strongly at the points where they cross the foundation pieces. These last are laid on flat, as is indicated by the wider parallel lines. This completes the frame.

It will be seen that the foundation pieces 3–4 and 5–6 pass beyond the points 16 and 15, where the nails make the hinges and run under the cross pieces. The object of that extension is that it may operate like the back of a knife somewhat, and prevent the opening of the frame wider than the point of levelness, as that would render it inconvenient in use.

Over this whole frame nail your cotton cloth, on the outer edge of the frame, and also slightly to the two middle cross pieces. Cut a slit in your cloth from 7 to 9 and from 9 to 4, for the admission of the tree. A short stick may be nailed to its outer edge, from 7 to 9. Thus it can be laid back, for the admission of the tree, and then restored to its former position, which completes the circuit of the tree.

Mode of using this Machine.—Let two persons remove it from some outhouse, (where it had been laid up closed for the winter,) lay it open and take hold of it at the opposite side from 19 to 6. Carry it to a plum tree, which is to be entered at 17. If the ground is not planted lay it flat upon the ground and step upon it if necessary, otherwise hold it above the vegetables. Let a third person jar the tree. This is done by having a flat ball-club covered with cloth or India rubber, which, being laid against the principal branches of the tree, is struck a short and quick blow, as that best disengages the curculio from his hold. Let all hands engage in killing the pirates. This is best done with the thumb and finger. This is better than to attempt to throw them into a pail of lye, or tobacco water. The bug is somewhat dry, and this mode is by no means offensive.

Go over your plums, (*peaches*, and *cherries* too, if you have them,) about every other day, till you find you have conquered them.

History of its use for 1851.—I began to use it June 2d, (a little too late for the tenderest sorts of white plums,) and continued its use until the 17th, using it nine times in all, and applying it to 65 trees. It cost three men two hours labor to get round. The wind was frequently so strong as to blow some of the insects beyond the compass of the machine.

Here then are fifty-five hours of labor, equal to five and one half days, of one man, which, at 75 cents per day, amounts to four dollars and twelve and one half cents, which is equal to six cents a piece for my plum trees. This is a small sum compared with a crop of plums.

When first going round, we frequently found 30 curculios on a single tree. On the ninth time, we found but 132 on the whole.

Results.—1. My Washington Bolmars, Green Gages, did not flower freely, while they are constiutionally more exposed than the dark colored plums. On these the crop was light.

2. Prince's Imperial Gage, and the Yellow Gage, gave very heavy crops.

3. The Bleeker, Elfrey, Damsons, and a plum without a name, bore overwhelming crops.

I ought to state here, though the statement does not affect the present argument at all, that I lost many of my plums, gooseberries, and all my grapes, by wet and hot weather in July, which defoliated the trees, and caused the fruit to rot and drop without ripening. I had a row of Bleeker's Plum in a position where I did not wish to retain them. These, in the hurry of business, were neglected. The curculios took the entire crop; not a plum ripened. So, also, I had three very productive trees which grew in the grass, and were nearly neglected. Here, too, I lost nearly all the fruit.

Conclusion.—Here is a machine, simple, cheap, not easily got out of order, and readily used. If applied at the right time, and with any faithfulness, it is a certain defence against the curculio. Now, if any one with a knowledge of it, permits his choice plums to fall a prey to the curculio, let him be doomed to eat wild plums, and choke pears as long as he lives. Let all, then, who would save their plums this year, be sure to prepare their trap for the robbers in time. Let them, if possible, begin to use it at least the day before the invasion commences. Let them prosecute the war while the enemy lurks in the field. In two or three years the victory will substantially have been gained, and then a very little timely labor each year, will keep all safe. C. E. G. *Utica, Jan.* 7, 1852.

P. S. Those who are interested in this subject, need not servilely follow my plan. Two things, however, are to be kept in mind, in all precautions to guard plums from the curculio. One is, that it is cheaper and surer to make *direct war* upon him, than it is to set up scare-crows. The other is, that that method which brings him with most speed and certainty, a helpless prisoner at your feet, is the best. I claim the discovery of no new principle. The idea of catching him upon a sheet is not new, but my mode of *adjusting the machinery* is new, so far as I am acquainted with the history of the subject. Other shapes, and other modes of spreading and confining the cloth, may be devised. It has always happened in my experience, that at the time the curculio must be fought, if ever, the state of the wind is such, that all efforts to catch him, upon loose sheets spread upon the ground, would not only be slow and uncertain, but in three cases out of four, perfectly hopeless. A machine such as I have suggested, will cost, to those who have ready access to the right materials, about two dollars. Any common man, who can handle a saw and hammer, can make it himself. My machine, in two years, has not cost one shilling for repairs, and is good for years to come. C. E. G.

Remarks.—We are entirely satisfied of the usefulness and efficiency of the above described frame for catching curculios, having for some years used one somewhat similar. Our correspondent will find a figure and short description on page 182 of the Cultivator for 1848, and also, of an umbrella very successfully used for the same purpose. This frame was made of strips of common sawed lath, an inch wide, and half an inch thick, fastened together at the corners by lath nails, previous annealed to facilitate clinching. The muslin itself, formed the hinges, and the whole being in two pieces, they were not cumbrous, and could be easily managed by one person, though not so expeditiously as if entire, and with an assistant. About two hours were required to make these frames, and their whole weight was about six pounds—about one-third of that described by our correspondent. We think smaller timber might have been used in constructing the latter, so as to reduce its weight about one-half, and it would then constitute the most complete thing of the kind yet known.

For small trees, we have found the large white umbrella, above alluded to, the most convenient and expeditious, as one movement threw all the insects caught on each tree, into a pail of hot water, enabling one person to clear 35 trees in 15 minutes. This umbrella was six feet in diameter, and cost two dollars at the umbrella factory. On page 49, of the Cultivator for 1850, R. H. Drake describes his success with an umbrella eight feet in diameter, made after this suggestion.

Our correspondent has shown very conclusively, that his practice may be relied on for entire success, and yet we think some modification may be required where the circumstances are different. Twice or even three times a day in warm weather, and where the insects are abundant, will not be too often to attack them; for if left 24 hours, a dozen will spoil a great many young plums. When the trees are quite large, it will be impossible to jar them sufficiently through a muffled pounder, or by other means, applied to the bark of the tree, without bruising it. The only way is to saw off a small limb, leaving a stump an inch long to be struck a *sharp blow with an axe.* Anything less efficient will be sure to leave a part of the insects on the tree. It is the want of an energetic application of this mode of destruction, that has led some cultivators to denounce it as inefficient.

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Cherry Trees Destroyed by Insects.

Eds. Cultivator—An inquiry made by Mr. John Waters, of New-Milford, respecting an insect which destroyed his young grafts, reminds me of something that I should have made public before this.

For several years back I have been perplexed and annoyed by the appearance of my young cherry trees in the early part of summer; for on the springing of the sap they would appear strong and healthy, and seem to promise an early and vigorous growth; but as the buds unfolded themselves, they would begin to shrivel and to lose force, and after struggling for a few days or weeks, would finally drop off entirely.

For a long time, I supposed it to be the effect of our very cold winters, and had almost abandoned the hope of rearing the finer varieties in these parts; but as there was occasionally a tree that did not show any such signs, although equally exposed to the weather, and would thrive exceedingly, I was led to believe it to be the work of some insect or animal, which had not yet been described as a tree-destroying thing.

I was soon convinced that it did not commit its depredations in the day-time, for I watched closely for sometime, without discovering anything, and yet the trees continued their sickly appearance; but on watching by night, I readily discovered that the young leaves were eaten as fast as they shot out, by an enormous beetle-bug, that only gnawed by night. I also discovered that these same beetles rose from the ground immediately under the branches of the trees; and by further examination by day-light, I found that there were from one to fifty of these bugs under every tree, either in the mulching or in the mellow soil. Now, after having made this, (to me,) very important discovery, I proceeded at once and deliberately, to knock each one of these malicious beetles on their heads, until their jaws were broken, and they were thus incapacitated for doing any further injury to the cherry trees. My trees at once began to assume a fine foliage and to renew their health, and since then I have had no difficulty in giving them an early start.

My practice is now to visit each one of my *small* cherries, two or three times a week during the first weeks of their annual growth, and to *hoe* them carefully. In this way I keep a fine nest for the bugs directly around the trees, which they greatly prefer to any more distant, and then I can, as I hoe, pick them out and cripple them at my leisure. Now, I am quite confident that Mr. Water's trouble is occasioned by this same great beetle, which is very common in this whole country.

It is a bug about three-fourths of an inch in length, of a dark red color, and with a small black head. It is commonly noticed when it gets into the house on a fine May or June morning—when, after having made a desperate pass at the nearest candle or lamp, it brings up against the opposing wall, and with scrambling vain efforts to regain its lost equilibrium, precipitates itself, sprawling, upon the floor. But seriously, the effects of this beetle upon my trees, before I found out its practice of eating the young leaves, was very pernicious. At least one tree in ten was destroyed; and those they did not destroy they rendered spare and gaunt in their forms. Wm. R. Manley. *Newport, Herkimer Co., N. Y., Feb.,* 1852.

Vines for the Decoration of Cottages.

We have heretofore noticed A. J Downing's work on Country Houses. Every person familiar with his writings, must have observed the perfect fitness or appropriateness of every part of his ornamental designs; there are no incongruous groupings of objects beautiful when taken alone—no solicisms in taste. For this reason his remarks on the *color* of houses, their *exterior decorations*, &c., never fail to be valuable. With the hope of interesting our readers, as well as impressing them with a more distinct knowledge of the merits of this work, we furnish a few additional extracts. The expression which a building derives from the aid of external objects, and especially from trees, shrubs, and vines, is thus pointed out:—

"It is upon these latter objects that the true *rurality* of almost all simple cottages depends; and nine-tenths of all the cottages that have endeared themselves, through their local and living beauty, to the hearts of true poets and genuine lovers of nature, have owed most of their charms rather to this rurality—this wealth of bower, and vine, and creeper, than to any carved or sculptured gables, window heads, or other features bestowed by the careful hand of the architect.

"Take almost any of those exquisite cottages in an English landscape, which charm every beholder by a wonderful beauty, found in no other land in the same perfection, and subject it to the dissecting knife of the searcher after the secrets of that beauty, and what does he find? That not one of these cottages is faultless, in a strictly architectural sense—nay, that they abound with all sorts of whimsical and picturesque violations of architectural rules and proportions, and are often quite destitute of grace of form or outline.

"But on the other hand, they are so bewitchingly rural! Partly, to be sure, by their thatched roofs, and latticed windows, and low stone walls, all of which seem to grow out of the ground, and to be rather a production of nature than of art, (proving incontestibly how genuine is the love of rural life in those who build and inhabit such cottages,) but mainly through the beautiful vines and shrubs that embower them, which, by partly concealing and partly adorning their walls, give them that expressive beauty of rural and home feeling which makes them so captivating to every passer-by.

This *drapery* of cottages—the vines that climb, or trail, or creep over them, and around their porches and windows—deserves, then, something more than a passing glance from all who would understand the secret of making a simple country house beautiful at little cost. For it must be remembered, also, that while chiselling ornaments in stone, or carving them in wood, soon makes a figure in one's account book, a few roots of those vines which will soon grow into forms of graceful and perennial beauty, may be had for a trifle, or will be gladly given by some friend whose garden overflows with its wealth of shrubs and climbers.

"But, though all vines are beautiful in their appropriate places, they are not all fitted for the decoration of rural cottages. Some are only at home when trailing over rocky precipices, others when climbing high trees, and others, again, are so delicate as to need the support of slender trellises in the flower-garden.

"A vine fitted by nature for the drapery of rural cottages, should unite fine foliage, which holds its verdure for a long time, and is not often the prey of insects, with a good *massy* habit of growth. If its flowers are also beautiful or fragrant, so much the better, but by no means should fine flowers, which last for a fortnight, lead us to forget fine habit of growth and good foliage, which are constant sources of pleasure.

"Besides these requisites, we must add, that popular vines for a cottage must be such as are perfectly hardy, and need no protection, and which have a way, for the most part, of taking care of themselves—in other words, which will grow into pleasing or picturesque forms with only an hour or two's pruning or tying up once a year.

"For cottages at the north, one of the best hardy vines is the Virgina creeper, (better known as the American Ivy, or five leaved Ampelopsis,) a wild plant which grows with wonderful luxuriance, and attaches itself without any assistance to wood or stone, by the fibres it throws out from its stem. Its leaves, glossy green in summer, but turning to the finest crimson before they fall in autumn, the rapidity of its growth, and the absolute no-care-at-all which it requires, will commend it as perhaps the best of all plants, when the effect of foliage is desired in as short a time as possible, as well as for concealing or adding to the beauty of any part of a *blank* wall of a cottage.*

"The Chinese Wistaria, now perfectly naturalized in the Middle States, is one of the finest vines for the pillars of the cottage porch or veranda. It will extend its shoots to 40 or 50 feet, if allowed, while it may be kept within the limits of a small column, if desired. Its long pendent clusters of delicate pearly lilac flowers, have a strikingly elegant appearance when properly scattered over the shoots in May, and its abundant light green foliage has a pleasing effect, whether for trellis, wall, or veranda.†

"Climbing roses are also great favorites for pillars and porch trellises. The most deservedly popular for the cottage, are the Boursalt and the Double Prairie roses—because they have fine foliage, grow very rapidly and luxuriantly, blossom profusely, and are perfectly hardy in all parts of the Union. The *Amadis* is the best variety of the Boursalt, and the Queen of Praries and Baltimore Belle the best Double Prairies for cottage decoration. Amateurs who wish to add a still further charm, and are willing to bestow a little more care on them, may, by budding the long shoots with Bourbon roses, have a succession of fine flowers every day during the whole growing season.

"In the Southern States, the fine Noisette roses, such as Cloth of Gold, and Solfaterre, take the place of the Prairie roses of the north.

"Among the honeysuckles—the "lush woodbine" of the poets—there are two admirably adapted for cottage adornment, viz: the Japan or Evergreen Honeysuckle, (*Lonicera japonica*‡) and the Trumpet Honeysuckle, (both scarlet and straw color.) The former is deliciously fragrant, and blooms all summer, holding its masses of rich, dark green foliage till mid-winter; and the latter, though not fragrant, grows in fine masses, and flowers most abundantly at all times. Neither of these honey-suckles is infested with the insects which deform some of the other species, and render them unfit to be planted near a cottage window.

"For cottages of stone, brick, or rough-cast, there is no climbing plant in the whole world equal to the Ivy—the evergreen Ivy of Europe. Its dark green foliage forms at all seasons of the year, the richest drapery that ever festooned or wreathed either castle or cottage; and we need say nothing of the associations without number, which the mere sight of this plant always brings to the mind.

"The Ivy does not thrive very well in New-England, except in sheltered places, for the winters are rather too severe for it; but in all other parts of the Union, it grows easily and rapidly. It likes a dry and loose soil, and should, at the north, while young, be a little protected, for a winter or two, with boughs of evergreens, till it gets established. It will often thrive in cold sites, on the north sides of houses, or under the shade of trees, when it fails in sunnier sites, because it is the sunshine, in mid-winter, and not the frost which injures it in the latter situations. The Giant Ivy, (now quite common about Philadelphia) is a larger leaved, richer looking, and more vigorous variety, than the old species.

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* In some of the elm forests of of Western New-York, growing on the broad lowlands, this plant presents a most conspicuous and striking appearance, when its leaves change color in autumn. The branchless trunks of the trees, to a height of sixty or seventy feet, are not unfrequently covered from bottom to top with an uninterrupted mass of brilliant crimson, and even many of the larger limbs up among the dense green of the forest, are enveloped in the same fiery glow. Eds. Cult.

† One of the finest plants of the Wistaria in this country is now growing on the grounds of Thomas Hogg, at Yorkville, near New-York. It covers an arbor, some fifteen feet in length and breadth, and there were the past season about *four thousand* racemes of flowers, each raceme being nearly large enough to fill one's hat. Eds. Cult.

‡ Chinese twining Honeysuckle of some.

"In New-England, the American Ivy or Virginia Creeper may be used as a substitute for the European Ivy; both bearing a resemblance only in attaching themselves firmly (by the little rootlets sent out from their branches) to the wall, however hard it may be, and neither of them injuring it. Indeed, the European Ivy preserves a stone wall from decay."

To those who prefer uniting the useful with the beautiful, the grape and the hop are recommended—of the former, the Catawba and Isabella are named as thriving best, and to which we would add the Clinton, as being remarkable for its hardiness, free growth, and dense masses of light colored foliage. The hop is justly pronounced the most rustic of all climbing beauties, and ornamental in the highest degree, although usually condemned to a pole in the kitchen garden or hop field. For houses that need occasional painting, it is proposed to place the trellis for the support of climbers, at least a foot from the exterior walls.

We cannot extend our extracts further—and our readers who may be interested in the subject, are strongly recommended to procure the work at once, and those who are not, can hardly fail to become so, by reading one-tenth of its contents.

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Product of Native Cows.

Eds. Cultivator—In your article in the January Cultivator, on the produce of native cows, I was gratified to find that *you* appreciate, in some measure, the value of native cows—sure I am the public do not. Without looking farther, we are very apt to value an animal in proportion to its cost; and as imported stock has cost much more than our native, the public have believed they are so much the more valuable. In comparing the produce of two cows for instance, we have in a measure disregarded the manner and amount of feeding, and the size of the animals.

Now it is certain that the same cow may be made to produce from one-quarter to one-half more milk, by the manner of feeding—that is, whether fed on grain, or grass feed alone, and the difference in the quality of pasture alone, will produce nearly the same results.

Again, animals like the improved Short-horns, will average from one-fourth to one-fifth larger than our native cows; and to make a fair comparison between the breeds, the Short-horns should produce as much more as they are larger in size, because the cost of keeping animals, as a general rule, is in proportion to their size. There may be exceptions to this rule; but that will not militate against the justness of the rule—therefore the worth of the animal may be estimated by comparing the cost of keeping with the annual produce.

Now, taking these data as a guide in judging, we can very easily ascertain the comparative value of different breeds of cattle as milkers. Having been for several years connected with Agricultural Societies, I have been in the way of collecting facts respecting the produce of cows, which have been presented for premiums at the different exhibitions within Hartford county, for years back; and these facts have satisfied me that in our desire to improve our breeds of cattle, we have overlooked or misprized the worth of our native stock.

Among the number of certificates, made by the owners of the animals, and now in my possession, I propose to give you an abstract of two or three as a specimen of the produce of pure native cows—that is, of descendants of animals brought to this country more than 60 years ago, and you may publish them or not as you shall deem best. I think I can vouch for the accuracy of them, because they are from farmers I know, and in whom I have full confidence. The first is from Mr. Porter, a near neighbor, who was requested to give the whole product for a year, which is the only one I have been enabled to obtain for that length of time. Mr. Porter's verbal statement, on giving me the certificate, was, that he owned only this cow, and used during the year milk from that cow for his tea and coffee, and that occasionally he ate milk at night—(there were two only in the family.)—also that a part of the year he furnished a neighbor with milk for tea. His certificate gives the weight of each separate churning during the year, with the date of the same—I will give you the product of each month, as shown in his certificate. The cow was of medium size, kept on grass and hay only, without grain—age of animal eleven years:—

	lbs.	oz.		lbs.	ox.
October,	48	2	May,	36	5
November,	49	15	June,	44	10
December,	40		July,	38	6
January,	39		August,	30	15
February,	33	12	September,	36	7
March,	34	5			
April,	31	11		463	8

The Purdy cow produced 16 lbs. in seven days—the owner thinks she will average 17 per week through the summer months, provided it is in her first month of milk—this cow is one-quarter Devonshire, three-quarters native.

The next is a certificate of a heifer of two years—five months in milk—reserved three pints milk daily for family, and produced 13 pounds butter from 9th to 15th October, on grass feed alone—the cow is now seven years old, more than medium size, and I have assertained from the family who own her, that during the past summer, she has produced daily from 24 to 26 quarts of milk,—grass feed only.

Another was a trial, at my request, in the month of September, owned by W. Stephens. It was a dry month, and the feed not as good as earlier—5½ months in milk—produced 14 pounds in seven days. Mr. Stephens thinks they made two and a half pounds per day from her in the preceding June—cow less than medium size.

The Mallory cow—milk weighed 46½ pounds per day—made 10 pounds butter in 7 days, besides selling five quarts per day of milk,—month of June, grass feed—medium size.

Now, ask your American Agriculturist friend, to show his certificate of cow kept in the same way, of not larger size, and when produced, if satisfactory I may perhaps send you a second batch that I have in reserve. Respectfully yours, Egbert Cowles. *Farmington, Ct*

Review.

"THE DAIRYMAN'S MANUAL: being a Complete Guide for for the American Dairyman. With numerous illustrations. By GURDON EVANS, M. A."

BOOK-MAKING is working wonderful progress in these United States. Genuine *authorship* is quite another matter. With the first, our printing presses teem with a fecundity possible only to the facility with which paper, types, and printing ink, are supplied. Its *quality* in the way of merit, appears to be of little account, provided the book will sell. The current demand for agricultural books, seems as likely to be supplied from this branch of the trade, as that of any other kind of literature; and the work now presented is a genuine, unadulterated type of the book-making genus.

A "Dairyman's Manual," as this book professes to be, is much wanted in our country, of the right kind; and whether this is the one required, we shall proceed to examine. To begin: it is an old fashioned notion—perhaps it may be nothing more than a notion in the minds of some people—that an author, or even a creditable book-maker, should have some experimental knowledge of the subject on which he writes, or compiles, as almost every subject contains some chaff among the wheat which it offers; and the knowledge in question is necessary to sift the one from the other; and, when the office of selection is the only toil of getting up the work, the winnowed grain only, should be given to the public.

To say that this book of 235 pages, in octavo, is well printed, in clear, large type, and on good paper, which it is, is no more than should be said of any book worth printing at all, in the present perfection of the typographical art. So far it is unobjectionable. In other things it has merit. It is well divided into chapters on the several parts of the subjects discussed; and which, if well selected, might become a quite passable authority with those who require to consult its pages. That the compiler does, either theoretically, or practically, understand the subjects of which he has treated, and arranged, I must be allowed to entertain some doubts. Still I am disposed to deal with him candidly and kindly, commending his judgment where it has been well exercised, yet condemning it frankly where he has played the quack. Fidelity to the truth of agricultural progress, and to the public, will not permit me, for the sake of kind words, towards the book-making fraternity, to aid in palming off either their mistakes or their crudities, upon the confidence of our farmers.

The first chapter of the work under consideration, alludes to the history of the dairy, going back to the Book of Job for authority, and in three pages bringing the subject down to the current time. Chapter II. treats of the importance of the dairy, by giving some statistics of the value of cows, and their dairy productions in the state of New-York, together with the produce of several individual cows, from recorded statements already published, principally from the volumes of Transactions of our State Agricultural Society. Chapter III. contains a brief notice of some different breeds of cattle, acknowledged to be from the "Encyclopedia of Geography," accompanied by two portraits—a Jersey bull and cow—taken from cuts of the aforesaid "Transactions," and followed by some common-place remarks, for the fortieth time reiterated, and as many times discarded, of the policy of rearing up an *American* breed of dairy cows from the common heterogeneous blood of our *native* stock, as being superior to any improved foreign blood for dairy purposes.

Chapter IV. on the "different breeds of Cows," with the cut of a Short-horn bull, opens decidedly rich. For the instruction of my readers, an extract is offered:

"The Short-horn, or Durham. This a high bred English variety, some branches of which date back an uninterrupted pedigree for many generations. The improved Short-horns *originated* with Mr. Charles Colling, a distinguished cattle breeder of England. He owned a bull named Hubback, of the Teeswater breed, smaller than that breed in general, but remarkably disposed to take on fat. From this bull, and a Galloway cow, he commenced that famous stock, the IMPROVED SHORT-HORNS!"

This will answer, I think, to start with; and although one would infer from a sort of general allusion to his authority for this paragraph, that the author was so instructed from an article, in the "Transactions" of 1841, (mis-printed in this book as 1849,) by Col. H. S. RANDALL; he should have had discrimination enough to discover that Col. RANDALL neither said nor inferred any such thing, in the article in question.

This reiterated slander upon the genealogy of the Short-horns, by a class of men who profess to *instruct* the public, but who are either too ignorant, or too lazy to investigate the truth, has been so long chronicled through the pages of our agricultural books and publications, that I here desire to place my finger upon it, in a standing record in your pages, and to settle the question as it should be. The long and short of this Colling, and Hubback, and Galloway matter, is this. The Short-horn breed of cattle can be traced, in the north-eastern counties of England, back, not only through many "generations," but for many centuries. The bull "Hubback," about which so many erroneous assertions have been made, touching his lineage, and the short time he was used as a stock-getter, was, according to the best investigation, a thorough-bred Short-horn, and got calves years before he became the property of Mr. Colling, and for several years after Mr. Colling sold him; and Mr. Colling never ascertained his great value until after he had parted with him, and the bull became the property of Mr. Hubback, from whom the bull afterwards took his name. This bull was calved in the year 1777. The Galloway cow, in question, which was the great grand dam, by other Short-horns bulls than Hubback, of the cow Lady, bred by Charles Colling, only one-eighth in Galloway blood, and seven-eighths Short-horn, was calved in 1788, and Lady, her great grand daughter, was calved in 1796. From this cow Lady, and his own unadulturated Short-horn bulls, Mr. Colling bred several animals, which he sold at high prices at his great cattle sale in 1810; and from men, among whom was Berry, an often quoted authority, who purchased this bastard blood, the descendants of the cow Lady—although the animals possessed it in a very remote degree—the story has arisen of their superior value, principally to raise the *selling* reputation of their own stock. Hubback had nothing to do with this recorded "Galloway cow." He died before she was born; and as to originating the "improved" Short-horns, Charles Colling had no more to do with it than the man in the moon. He has repeatedly confessed that he purchased as good cows of other cattle breeders, as any that he ever bred himself; and the chief merit of Colling is, that although a good breeder, he was, by the energy of his character, and his perseverance, the leading man of his day in making the Short-horns famous, and introducing them throughout many distant counties in England, where they had not hitherto been bred.

We fancy that the American breeders of Short-horns will not give to our author an assembled vote of thanks for his information on this head, which, if true, would at a comparatively recent date, make these favorite and highly valuable race of cattle, a compound of bastardy little likely to perpetuate the "long line" of ancient and legitimate blood and quality so universally attributed to them. Three pages of extracts, not over-well selected, with a touch or two of their dairy qualities, do up his notice of the most valuable race of cattle in existence.

Next follows a notice of the "*Devonshire*." We have always supposed these to be *Devons*, simply, without the *shire*. The author puts them down as *no* milkers, and consequently, in their high blood, unfit for the dairy. Had he known more about Devon cows, he would have written differently. When he can produce a cow, weighing, in ordinary condition, not over nine or ten hundred pounds, which will produce more milk, or butter, or cheese, or of better quality than numerous thorough-bred Devons that can be produced in this and adjoining states, we shall have a little more respect for his authority.

The Herefords and Ayrshires come next under review, in which he quotes Youatt, the English author, and but two or three pages are given to them. He notices very favorably, Mr. Prentice's fine Ayrshires, with a portrait or two from the "Transactions." With Mr. Corning, however, our author must have an account to settle, as the Herefords are given the cut direct, in the omission of any portrait of that distinguished race.

"Breeding for the dairy," is considered in Chapter V., in which some sad mis-prints, as elsewhere, occur in the names of animals—our author either does not write plain, or his proof-reading has been neglected. Here is an attempt to re-laud Col. Jaques' famous herd of "Cream-pot" cows, bred on his "Ten-hills farm," near Boston, as a "distinct breed" of American dairy cows. To the uninitiated, this may appear a new discovery, and achievement. It is simply an evidence to those who understand the subject, of what boasting and assurance can do, in palming off a very common thing upon such as know no better. Col. Jacques' cream-pots are good animals, no doubt. We have seen both the cows and their "cream," together with the milk which produced it; and it was all excellent of its kind. But Col. Jaques' cows are nothing more than the produce of Short-horn bulls, and good, native milking cows, and such as every breeder of such cattle can produce, and has produced, by the score, although they may not have made quite so much fuss about it. If American dairymen wish to produce the best "cream-pot" cows in existence, they have but to get a first quality, thorough-bred Short-horn bull, of a good milking tribe, and breed him to the *best* milking cows they can find, and after a generation or two, they will be in possession of a race of cows meeting their just expectations in all that constitutes excellence in the dairy cow. The author can, neither from his own observation, or by printed extracts from others, give us any better *practical* truth than this.

The next two chapters, VI and VII, are taken from Prof. Johnston, Sprengel, and other foreign and domestic authorities, hurried over with much less care and attention than their subjects are entitled to, mainly, we imagine, from the inability of our book-maker to understand their importance. In this latter chapter, the everlasting "Oaks" cow—he leaves out her cousin, the equally famous "Nourse" cow, neither of which ought to be mentioned without the other—"of the old breed, bought out of a drove," to prove their superiority, by this single specimen, out of millions of inferior ones, to any thing among the *improved* races. What a convenient thing it is that we have the chronicles of two such famous cows, with which every non-improver can at once sledge-hammer down his antagonist who advocates any thing of a better kind, and prove the superior excellence of the "old sort of cattle!" It is quite as edifying as the remark of an old crone that we knew in our boyhood, who, whenever great manual strength was in question, always squeaked out, that "after all their big stories, no man was half so strong as Sampson; and as for fox-hunting, the best pack of hounds, and all the shooters in the neighborhood couldn't hold a candle to him."

Chapter VIII, gives us a very good plan of a dairy barn, and cheese house, taken from one built by the Society of Shakers, at New Lebanon; and observations on dairy cows, and their keeping; all very well, winding up with the perpetually quoted doggrel lines, from the English Farmer's Magazine, describing the qualities of a good dairy cow:

> "She's long in her face," &c.

The next two chapters, comprising some 73 pages, contain directions for the cheese and butter dairies, made up of extracts chiefly from the Transactions of the N. Y. State Agricultural Society. These, so far as they go, are well enough, but are not, in completeness, what should be expected from one who assumes to write, or even *get up* a book on a subject of this importance. The subjects in hand are neither experimentally, nor philosophically handled; and although a considerable amount of detached information is given, it is not of a kind to instruct the dairyman in the detail, or in the successful prosecution of his business. Such isolated facts, drawn from the recorded operations of others, without the attendant circumstances to their success or their failure, owing to climate, soil, or position, can scarcely be a safe guide to the beginner in the prosecution of his labors; and certainly of very little account to the established dairyman in developing new ideas for his guidance.

The subject is a broad one, requiring mature experience, great observation, and an enlarged capacity, to instruct the dairyman of our country in what particularly appertains to their calling; and we fear it will be a long day before we shall find a work which will combine the experience, thought, observation, and *ability* which its importance demands. Mere compilations of miscellaneous matter may be got up by the score; the fledglings of the school-house, or the chemical lecture room, may essay in a thousand efforts to enlighten the public, or what is probably of more immediate consequence to them, to put a few extra dollars into their pockets, by the sale to a credulous public of their crude scissor work; but we may look in vain for a competent authority on the subject until some man of mind shall address himself to the task, and devote the time and talent to its prosecution, necessary to its full understanding, and for which he will hardly, as yet, get an adequate compensation. Such a work I should hail with heartfelt pleasure, and would do my best to advance, and to circulate.

The remaining eight chapters of the book are devoted to diseases of cattle, and their cures, taken from Youatt, and just enough of them to make it of very little value to any one who needs a work of the kind. Better to apply to Youatt at once, than to resort to the emasculated text of a competent authority at the hands of one who confessedly does not understand the subject which he is attempting to handle. We confess, in all candor, that the book is little, if any better, with this medical addition to its pages.

It may be thought that I am unnecessarily curt with the pages of my young friend, who with laudable motives, no doubt, has got up his book for the instruction of our farmers and dairymen. I would do nothing to wound his feelings, or to cut down his ardent aspirations for either fame or fortune. Public attention is fast turning its eye to our extended agriculture. It is more rapidly enlisting the talent, the thought, and the capital of our country, into its interest, than formerly, and it is important that the young inquirer be not led astray by the crudities of those who write without a knowledge of the length and breadth of the subject before them.

PLATANUS.

◆

FOOT-ROT IN SHEEP.—An intelligent correspondent of Moore's New-Yorker, considers this disease as not contagious, except in its most virulent state. His own flock, of three or four hundred, had been perfectly healthy for a long period,—no disease had ever prevailed among them —they were on high land, well watered,—not a rod of wet, stagnant, or swampy ground—remote from all other sheep,—not a hoof from any other flock had been among them—yet the disease came, slightly on a dozen at once, and during the season some 80 or 100 were attacked.

CHOKED CATTLE.—A correspondent of the Mass. Ploughman says—"Warm a small quantity of lard, and mix with it a small quantity of gun-powder, and pour into the throat. I *once* prepared a second dose, but had no occasion to use it."

FOOD FOR SICK ANIMALS.—The American Vet. Journal states that an excellent diet for sick animals, is simply *scalded shorts*. When a horse has taken cold, with discharge from the nostrils, the *mash* may be put into the manger while hot, with a view of steaming the nasal passages.

NOTES FOR THE MONTH.

Acknowledgments.—Communications have been received, since our last, from Granite State, L. C. B., B. B., S. B. Buckley, C. F. W., D. W. C., F. Holbrook, B. J. H., H. C. W., John Diehl, Elizabeth Diehl, Salmon Cook, W. P. B., G. B. Smith, S. M. Dorr, Prof. Norton, L. L. W., Geo. W. Coffin, Jesse Charlton, Excelsior, B., Daniel S. Curtis, P., A. Subscriber, P. F. E., W., F. B., Plowman, Evelyn, Warner, J. R. P.

Books, Pamphlets, &c. have been received as follows: Address of Col. M. P. Wilder, at the N. H. State Fair, from the author.——Transactions of the Norfolk (Mass.) Ag. Society, for 1851, from Hon. M. P. Wilder, Pres't of the Society.——Walks and Talks of an American Farmer in England, with illustrations; by Fred. Law Olmsted, from the publisher, G. P. Putnam, New-York. ——Transactions of the Hampshire (Mass.) Ag. Society for 1851, from J. W. Boyden, Sec'y——Transactions of the Middlesex (Mass.) Ag. Society for 1851, from Simon Brown, Esq., Editor N. E. Farmer.

Preserving Grapes.—We received on the 12th March, from Dr. T. W. Blatchford of Troy, a box of grapes, in nearly as fine condition as when picked from the vines last autumn. They were packed in coarse oak saw-dust, the finer particles of the dust having been separated by sifting.

☞ A correspondent wishes a plan for a cheap hen-house. Who will furnish a good one?

Sheep Husbandry.—We have received replies to the inquiry of "W. M'C.," in our February number, from A. H. Avery, Galway, N. Y.—B. H. Andrews, Waterbury, Conn., with samples of wool—L. and A. Whiting, Torringford, Conn., who all think they have such sheep as our correspondent desires. We have also, a valuable paper from D. S. Curtis, Esq., of Canaan Center, N. Y., on the general subject of breeding sheep, for which, with the others, we shall endeavor to find room next month. "D. W. C.," Tunbridge, Vt., will find the questions he proposes, discussed in these communications.

We have also been furnished with the report of a committee appointed at a meeting of farmers in West Westminster, Vt., to examine and report on the merits of the flock of French, Spanish, and Silesian Merino sheep, imported last year, by Geo. Campbell, Esq., of that town, and Wm. Chamberlain, Esq., of Red Hook, Dutchess co., N. Y. The publication of this report in our pages, seems unnecessary, inasmuch as all, or nearly all the facts embraced in it, may be found in a communication from the Hon. F. Holbrook, in our last volume, page 310. The same committee are to be present at the shearing of this flock, and when their report is made, we shall be glad to give it a place.

Homer.—We have been presented, by P. Barber, Esq., with a beautiful colored lithographic view of this pretty rural village, situated in Cortland county in this state. On the rising ground, back of the village, are exhibited some of the finest farms in the county. Among them, we notice those of Messrs. P. Barber, Israel Boies, A. Ballard, A. L. and Geo. Chamberlain and others. The print is from the establishment of Endicott & Co., New-York, and is well executed

Cultivation of Flax.—If practical proof were wanting of the pecuniary advantage, resulting from scientific investigation, the recent invention of flax-cotton would be a case in point. A description of the peculiarities of the flax-cotton and the mode of its preparation has been published in the Cultivator. Extensive preparations are being made for the manufacture of linen from the improved article, and the attention of farmers is invited to the profit of cultivating flax. A pamphlet, together with a sample of the prepared flax, has been received from Mr. A. Cameron of New-York. The flax is white and soft as cotton, while it seems to retain the firm and delicate fibre peculiar to itself.

Transactions of County Ag. Societies.—We are indebted to our friends, in different parts of the country, for copies of the Transactions of different County Ag. Societies. Some of these, are contained in a single newspaper, and some in pamphlets of 50 to 100 pages or more. They embrace, generally, the annual Address before the Society, the Reports of the Judges who award the premiums, and some of them, Essays of great interest, especially to the localities where published. We have had recourse to these Tranactions, for many important facts, heretofore communicated to our readers, and intend to draw largely from them hereafter. In tendering our thanks for them, we wish to make a suggestion to such Societies as have not adopted the plan of publishing annual reports of their doings. We know of no way in which they could more cheaply promote the objects they have in view, than by circulating through their counties, an annual pamphlet, containing the usual address, reports, &c. Let their speakers and their committees understand that their papers are all to be published; and that such reports are expected from them as will be creditable to the Society, and useful to the community. In addition to this, premiums might be offered for experiments and essays on subjects of practical interest to each locality. In this way, a considerable amount of important information might be collected, and circulated very generally in the different counties, and among many who never see an agricultural paper.

A National University.—Spirited meetings have of late been held in this city, for the purpose of discussing the importance of an Institution of a more broad and comprehensive character, than our colleges, and urging its claims upon the Legislature. These meetings have been addressed by Prof. Mitchell, Prof. Pierce of Harvard University, Prof. Bache of Washington, Hon. Saml. B. Ruggles of New-York, as well as by distinguished gentlemen of this city. There seems to be a deep interest among scientific and literary men, in this project, and there can be no reasonable doubt, but that the establishment of such an Institution would be the crowning stone to the present incomplete system of education. The wants of the Agricultural community would be cared for in this plan, and it would form a model for and nucleus to lesser institutions, designed to raise the standard of popular education. The warmth with which the proposal has been received by the leading scientific men of the country, goes to show, that the so-called literary *aristocracy* of the day, against whom so much cant is hurled, do not exist, and that no class of community are so much in favor of diffusing widely the benefits of a practical, sound education, as thorough scholars.

Large and Small Farms.—W. A. Ela writes, "I wish you would lay down some plan for farmers with small means and large farms, which would convince them that by giving away two-thirds of their land, they would be better off and raise more than to skin over the whole."

Plans of Farms.—The same correspondent remarks, "I take the liberty to make one suggestion in regard to your subdivision of farms. That is, that the farm buildings should be moved back at least one tier of lots from the highway. I am aware that I have a great majority of farmers against me, but I think for one to be 20 rods from the highway and the view of a beatiful lawn from the front of the house, would well pay for the extra travel in getting to the public road, and whatever may be written upon the subject should be to correct bad taste, although it may be against established custom." [We always hail, as the desert-traveller does an oasis, all indications of a taste for rural beauty in connexion with country dwellings, and of course could not object to a sacrifice of land or nearness to the road, to the increase of landscape effect. It will perhaps, however, occur to our correspondent that a greater perfection of this nature would consist in trees and lawn on the different sides of the house, instead of being only in the direction of the road, so that the spectator will not have to keep his head fixed in one direction, for fear he may see what is not agreeable. Neither will the passing traveller be compelled to reserve his sight till he gets exactly in front of the dwelling. Eds.]

Splitting of Cherry Trees.—D. C. Richmond, of Sandusky, informs us that some of his trees have split the whole length of the trunk, owing, as he thinks, to the severe weather of winter. He proposes to keep the bodies well wound with straw during winter on the first indications of the disaster, and intends to keep the parts bound together by one or more iron bolts, secured by nuts and screws. We have had no experience with trees similarly affected, but see no harm likely to result from bolting the parts together, especially when the bolts are covered with new wood. In the mean time, an application of grafting-wax, paint, or still better of a solution of shellac in alcohol, to any wounded surface, would doubtless be quite useful. Driving in nails could not be of any use whatever, further than their mechanical effect—if the trees need iron, which is very questionable, it could be most naturally and equally given by a solution of some salt of iron at the roots.

Plan for Illinois State University.—We have received a pamphlet from the pen of Prof. J. B. Turner, presenting in a clear, vigorous style, the arguments in favor of an Industrial University. The details of his plan do not differ essentially from others, which are before the public. The interests of popular education are claiming notice and gaining ground everywhere.

Potato Rot and Rust.—R. Young (near Louisville, Ky.,) states that the only portion of his potato fields where the rot was destructive, was in a rich cavity or basin where the growth of the plants was most luxuriant. He has observed, too, that it is in these localities that his wheat is most affected by rust—in both of which cases he ascribes the difficulty to an overgrowth and superabundance of moisture in the plants, and suggests whether manure copiously applied to such crops may not increase the disaster, and asks for information.

There is no question but that rust in wheat is often greatly promoted by a luxuriant growth of stalk, occasioned by an undue proportion of mould or vegetable matter in the soil, and that the remedy consists in a greater application of mineral and nitrogenous manures. We are by no means sure but that these might be advantageously furnished in rich *yard* manure. Soils vary, and experiment must determine. As for the potato rot, it remains involved in much mystery, but a moderately fertile soil is certainly more favorable to the health of the crop, than one unusually rich.

Destruction of the Peach Crop.—Mr. J. Clark, of Lewis, Brown co., Ohio, writes us, that the peach crop in his section of the State, is entirely destroyed by the frost. On the 20th January, 1852, he says the thermometer fell to 15° below zero, and after spending nearly half a day in examination, he did not find a single live bud. This appears to confirm the statement, that the peach will not endure a temperature colder than 14° below zero. Heart cherries and fine plums have shared the same fate.

Results of Draining.—It has been remarked, that "to apply manure to undrained land, is to throw money away," an illustration of which is furnished by a statement in the Transactions of the New-York State Agricultural Society, where seven acres of low wet land, manured annually at the rate of 25 loads to the acre, produced 31 bushels of oats per acre; but after being thoroughly underdrained at a cost of about 60 dollars for the whole, the first crop of oats without manure, was 89½ bushels per acre.

Raising Chestnuts.—Chestnuts will not grow rapidly on all soils, but on such soils as are suited to them; nearly all the failures we have known, have resulted from attempts to transplant them. We know of no tree so bad to transplant as this. The best way is to plant the seed in hills, like corn, but rather more remote; pull out all but the most vigorous plant, and they will soon form a beautiful young forest, and obviate all necessity of cultivating the ground, which at first is requisite. Their rapid growth is well known; a correspondent of the Ohio Cultivator, judging from his own experience, thinks that 1400 trees might be raised on an acre, averaging in 20 years 8 to 10 inches in diameter, making four rails the first cut, two the second, and one the third—about 10,000 rails per acre.

☞ "B." on "Raising Horses," will appear in our next. It came too late for this month.

☞ Answers to several inquiries, are necessarily deferred till next month.

Fine Farm.—Any one wishing to purchase one of the best farms in the State, is referred to the advertisement of Hon. **John Delafield**, in this paper, who, it will be seen, wishes to dispose of the fine farm on which he now resides, near Geneva.

Live Stock Insurance.—Owners of high-prized animals would do well to look to the advertisement of the Northern N. Y. Live Stock Insurance Company, in this paper. The names connected with it, afford a sufficient guaranty that the company will fulfil its obligations.

Morgan Horses.—Those interested in this breed of horses, are referred to the advertisements of Mr. **Mowry**, in this number of the Cultivator. He has now five animals of this breed, embracing some of the highest blood in existence.

☞ Our readers will notice that this number consists of 40 pages—eight more than usual—to enable us to accommodate our advertising friends. *This does not increase the postage on this number.* See extract from post office law on page 155.

☞ Our correspondent, L. L. W., Clear Branch, Va., can obtain the information he desires, by addressing Edwards & Platt, Brooklyn, N. Y. It is not in our power to furnish it.

Fine Pigs.—We copy the following from the report of the Hartford Co. (Ct.) Fair for last year:—"S. E. **Chapman**, of East Hartford, exhibited a sow, 5 years old, with a litter of 9 pigs, nine weeks old. These pigs 'laid out all others.' They were admired by all who saw them. They were the most beautiful pigs ever seen in this region. One of them, (and there was no great difference in their size,) weighed 74 lbs. the day before the Fair. Mr. Chapman purchased the sow on board of a Liverpool packet in New-York, when she was about 6 months old. She was an English shoat, of fine points. He raises two litters a year from her, for which he gets $5 each. She brings him in about $80 a year, her pigs being considered greatly superior to any others produced in this region." Mr. C. writes us that Mr. H. Beaumont of East Hartford, fatted two of her pigs—one at 9 months old, weighed 404 lbs.—the other, at 10 months, 422 lbs.

Profitable Fowls.—The raising of fancy poultry is getting to be quite a handsome business. Mr. **John T. Andrews** of Sharon, Ct., has published, in the Litchfield Enquirer, an account of his success in breeding fowls, from which it appears, that his profit on six pullets of the black Spanish variety, amounted to $181, or $30 each, he having sold 200 chickens at an average of $1.25. Better business than the dairy, that.

Applying Manure.—The following excellent practice is described by a correspondent of the Journal of Agriculture. We have often insisted on the importance of thorough intermixture with the soil, and are glad to see it reduced to practice. "I take much pains to spread the manure as evenly as possible, and harrow it thoroughly with a heavy iron-tooth harrow, first lengthwise and then crosswise the furrow, until the soil is well pulverized and the manure thoroughly incorporated with it." The same writer also remarks, "My manure is under cover during winter, and I am satisfied it is worth nearly double for being housed."

Prize Cattle.—The last London Farmer's Magazine, contains a list of the breeds to which the first and second prizes have been awarded at the Smithfield Club Show of fat cattle, for twenty years. They are as follows:

To Short-horns,	145
Herefords,	123
Devons,	33
Scotch,	7
Long-Horns,	3
Ayrshire,	2
Highland,	2
West Highland,	2
Angers,	2
Galloway,	1
Pembroke,	1

Osage Orange Hedges.—Bryan Jackson, of Delaware, informs us through the Boston Cultivator, that he considers this hedge as decidedly the cheapest fence that can be made; and that those planted on his own grounds in the spring of 1849, "are now a good fence, capable of turning horses and cattle." This is but three summers growth. Their rapid growth when young, rendering them capable of being shorn two or three times a year, brings them forward sooner than any other hedge plant.

Pruning Hedges.—J. Wilkinson, well known as the principal of Mt. Airy Institute, and who has had much experience in hedging, gives it as his opinion, (in the Prairie Farmer,) more especially in relation to the Osage Orange which has a vigorous growth, that wherever failure has occurred, it has been in consequence of lack of pruning. He has never in a single instance known or heard of a hedge being cut too low or trimmed too often, but on the contrary has known "miles upon miles, ruined, so far as small pigs are concerned, by the opposite course." He adds, "I think all the writers in the periodicals for the west, fail, if they fail any where, in not urging a more frequent and relentless mode of pruning, after the first year."

Not too late to Plant.—The New England Farmer furnishes a communication from H. F. French of Exeter, N. H. in which he says, "Mr. McClintock, of Portsmouth, who is now ninety-four pears of age, this year ate the fruit from trees planted with his own hand when he was *eighty-six.*" Another gentleman, having a very fine orchard, said, "I am more than seventy years old, but I have set over a hundred apple trees this fall." Again, he informs us that "Mr. Robinson says that when he planted his orchard with seedling trees more than fifty years ago, his friends told him there could never be a demand for so much fruit!" Yet this same year he says a gentleman of Hampton, in that State, sold fruit from about *four acres* of land this season for $800, and last year for $1400.

An Improved Meadow.—Charles Yates furnishes the American Farmer an account of the very successful treatment he gave a five acre meadow, by which he almost doubled the average yield of the three previous years, or increased the number of loads of hay from 19 to 32. The higher parts of the meadow were manured with wood-pile manure, and the lower with clay from a cellar—it was harrowed, sowed with three bushels of plaster, salt, and leached ashes, mixed together, and then rolled with a common roller. The grass was a mixture of timothy, herds grass, and clover. By "herds grass" is meant, we presume, the *red-top* or *Agrostis vulgaris*, and not the herds grass of the north, which is *timothy*.

The Red Cedar from Seed.—Isaac Hildreth, a skilful cultivator of trees, states in Moore's New-Yorker, that in no case where the trees hang full of berries, has he been able to find perfect seeds, and in nearly all that he has examined he has found no seed at all; while, where the berries grow scattering and singly, the seed are found perfect. He plants them in sifted leaf-mould, and shades the young plants.

Wool and Sheep.—Dr. Lee, in his Southern Cultivator, in speaking of his tour to the north, says, "Within the last thirty days we have seen a good many flocks of sheep, and pumped all the information we could from their keepers and owners, without finding much that is new in sheep husbandry. Good feed, plenty of salt, protection from vicious dogs, and care to use only the very best males for the increase of the flock, and to have the ewes yean at the proper season, are the cardinal points in this branch of rural industry." He says, "We have no doubt it costs the farmers of the south, all things considered, as much to grow 100 lbs. of poor wool, filled with dirt and burs, which sells at $15, as it need to cost to produce a like weight of clean good wool worth $30."

Punctuality.—Few are aware how much time is lost by a want of punctuality. Twenty men meet together for business, detained fifteen minutes by the slack-twisted habits of one, lose in all no less than *five hours* of time—a donation which they have to make usually with no thanks, or a very faint and flippant apology. A celebrated Frenchman, employed in arduous official duties, found that his wife was habitually ten minutes too late in coming to dinner. He found the difficulty incurable; and therefore determined to write a book. "He fixed on his subject, thought of it during his walk to and from home, wrote during these ten minutes every day and no longer, and in the course of a couple of years published one of the most able books of the age."

Inverted Crops vs. Frequent Plowings.—A gentleman in Maryland, (says Timothy Pickering,) plowed up part of a field of clover in March, but failing to plant it, treated it as summer fallow by repeatedly plowing it, and sowed with wheat in September. The residue of the clover field was mown twice, plowed once, and sown with wheat the same day as the other. The fallowed part yielded only 14½ bushels per acre; the other part, besides the two crops of clover hay the preceding year, yielded 24½ bushels per acre.

Taste.—The Michigan Farmer gives us a very good hint about some noted specimens of false taste, observed at the World's Fair. He thinks the painter and sculptor should copy nature; hence objects to such flagrant violations as "a nest of little marble cupids, as if hatched from eggs—cupids, snakes, and other animals carved upon pillars for sustaining a mantle-piece, and on the mantle itself, as if they were fire-proof, or delighted in being roasted—marble urns, big enough to crush a dozen men, supported by a slender-made man underneath—fountains, with streams issuing from the mouth of a carved goose," &c. &c.

Gophers.—The following mode of treating this animal, so troublesome in some parts of the western states, communicated to the Prairie Farmer, may be elsewhere useful as applied to other depredators. "When they are throwing up the ground their hole will be open—put a little arsenic or strychnine into a potato, and roll it into the hole, and the gopher will trouble you no more."

Postage of the Cultivator and Cultivator Almanac.

We re-publish the following, from our Jan. No., and add a letter from the Department, deciding that the *Cultivator Almanac* is subject only to the *same charge as a single number of the paper itself*, when sent to subscribers.

Post-Office Department,
Appointment Office, *Nov*. 24, 1851.

Sir—I have received your letter of the 20th inst. The "Cultivator" is considered as being under the classification of a "newspaper," as that term is defined by the 16th section of the act of 3d March, 1845; and it therefore is entitled to all the benefits granted to, and subject to all the restrictions imposed by law on such publications.

Respectfully yours, S. D. JACOBS,
1st Assist. P. M. Genl.

The postage on the Cultivator is therefore as follows:

For any distance not exceeding 50 miles,.........	5 cents *per year*.
Over 50, and not exceeding 300 miles, ...	10 cents *per year*.
Over 300 " 1,000 miles,..	15 " "
Over 1,000 " 2,000 miles,...........	20 " "
Over 2,000 " 4,000 miles,.....	25 " "
Over 4,000	30 " "

To prevent any misapprehension we quote the 16th section of the law of 3d March, 1845, referred to in the above letter. It is as follows:

Sec 16. And be it further enacted, that the term "Newspaper," hereinbefore used, shall be, and the same is hereby defined to be any printed publication, issued in numbers, consisting of not more than two sheets, and published at short stated intervals of not more than one month, conveying intelligence of passing events, and *bona fide extras and supplements* of such publication."

By this extract it will be seen that the *Pictorial Cultivator Almanac* is entitled to go to our subscribers as a supplement to The Cultivator, it being a "*bona fine supplement*" to it, and nothing else. The Almanac is not published for sale, and is sent only to subscribers to the Cultivator.

Post-Office Department,
Appointment Office, *Jan*. 28, 1852.

Sir—I have received your letter of the 23d inst., asking whether the "Cultivator Almanac" ought to be considered as a Supplement to the Albany Cultivator, and rated with postage as such, or be considered as a transient publication, and rated accordingly.

A "Supplement," to come within the provisions of the law which allows such issues to be sent to subscribers at a postage equal to the sum paid on a single number of the principal publication, at subscription rates, ought not to exceed three ounces in weight, and should contain such matter only, as will supply that which is wanted to make the principal publication complete.

Upon examination of the "Cultivator Almanac," I have come to the conclusion that it may be considered as a Supplement to the Albany Cultivator. Respectfully yours, S. D. JACOBS,
1st Assist. P. M. Genl.

Jacob Allen, Esq., P. M. South Hartford, Washington Co., N. Y.

Albany Prices Current.

Albany, Tuesday, March 16.

FLOUR.—Our market, which, at the date of our last report, was buoyant, with an upward tendency, has become dull and heavy, with only a limited home and Eastern demand. Quotations may be given at $1.62½a4.87½ for common to good State and Michigan, $4.87½a5.12½ for fancy State and Michigan, $5.12½a5.25 for extra Ohio, and $5.37½a 5.50 for extra Genesee. Buckwheat sells at $1.50.

GRAIN.—Wheat has followed the dullness in flour, and the sales since our last have been on a limited scale, we quote sales of only 3300 bushels in lots, at 114c. for fair Genesee, and 117c. for a prime lot delivered at the East Railway Depot. In corn the sales include 4,000 bushels, yellow round, to arrive at the railway, part deliverable between 1st and 15th March, and part between the 10th March and 10th April, at 63½c. Also, 2,000 do., delivered at the road, at 63½c. The only sales of Barley are 3,000 bushels two rowed, at the road, at 72c., 3,000 do. do for delivery on board a boat at the opening of the river, at 75c., and 900 do. do. at the road at 70c.; there are free sellers of Barley, taken as it arrives at the road, at 71a72c. Barley malt retails at 93a94c. A sale of 4,000 bushels Rye was made, deliverable in N. Y. at the opening, at 75c. The street trade in grain is moderately active, we quote Oats 37½a38c., Corn 66a67c., Rye 71a 72c., Barley 68a72c., Small Peas 75c., Marrowfats $2a2.25.

SEEDS.—During the last week have had a dull but firm market in Clover, owing to the favorable advices from Europe and the large shipments from New-York and Philadelphia; we quote medium at 9¾a10c.; large 10½c. Timothy $2a3. Flax $1.25.

PROVISIONS.—We notice an advance in all descriptions, with a good market, especially for the retailers. The continued favorable advices from New-York and New-Orleans can not fail to be without its influence on our market. We quote prime pork $14 50a15, mess do. $17. Beef, $10 for mess. Smoked beef 9½c. Lard 10c. Smoked hams 10a11c., shoulders 8c. Butter 20a24c. for State and firm. Cheese scarce at 7½a8. The sales during the last week include 350 pkgs Canadian butter, to a New-York operator, at about 18c.; 34 bls. clear pork, early in the week, at $17; 108 bls. Michigan mess beef at $9, and 75 do. Western prime pork at $13, and now held for advance. At New Orleans mess Pork on 13th was firm at $17. At New-York the stock had fallen off to 5,000 bls. of which 1,000 do. was old.

HOPS are in light retail demand at 27c.

WOOL.—The sales in this market, since our last, embrace 19,000 lbs. Delaine at 40a41c., and 20,000 lbs. fine fleece at p.t.

The N. Y. Dry Goods Reporter, of Saturday, says of the Domestic Market: The operations of the week have been to considerable extent, but prices are so carefully guarded that it is impossible to arrive at any other conclusion than a material decline. The sales that have come to our knowledge are 25,000 lbs. decidedly fine on private terms; 18,000 lbs. medium at 38c.; 10,000 lbs. at 43c.; and 4,000 lbs. country pulled at 37½c. We think every thing tends to the depression of prices for wool. Manufacturers appear to be well supplied, while the low rates for fabrics will cause many to stop a portion of their machinery.

In reference to the market for foreign wools the Reporter says:

We notice an increased activity in this mardet, with sales aggregating 12a1500 bales, 1200 of which (all the stock held by one heavy importer) were sold to a large eastern consumer on private terms. We are unable to learn the particulars of the above heavy sale, but know enough to say it includes Mogadore, African, Smyrna, and some unwashed Spanish. We also quote sales of 70a80 bales unwashed Smyrna at 14c., and 50a60 bales washed Cordova at 21c.

At Boston the market has been very quiet for both fleece and pulled wool, and the tendency of prices is in favor of buyers; sales moderate in the range of quoted rates. In foreign there have been sales of 70 bales of Cape of Good Hope on private terms; and one of our large manufacturers has been purchasing some 1800 bales African and other foreign wool in New-York on terms we did not learn.

At Philadelphia the demand has been limited, but prices are steadily maintained. Sales of 40,000 lbs. within the range of 34a56c. for common and fine Washington co.

Farm for Sale.

FOR sale, a farm consisting of 154 acres, situated eight miles south of Michigan city, and the same distance west of Laporte. The farm is well timbered, and has two never failing streams of water. About 50 acres of the farm are under tillage, and an orchard of Apple, Peach and Pear trees, is flourishing finely. There is on the place, a two-story frame house and barn, with sheds and other out buildings. There are two plank roads within two miles of the farm, affording easy access to a good and constant market. Railroads are now being built, which will make the location more desirable.

Being desirous of removing to Oregon, the above premises will be sold at $8.00 per acre.

Also for sale, forty acres of land lying on the Southern Plank Road, partly in timber, and partly in meadow land—either with or without the farm. GEORGE SMITH.

Cool Spring, Laporte Co., Ind., April 1—1t.*

FOR SALE,

THE THOROUGH BRED STALLION HORNBLOWER. I desire to sell this valuable horse for the low price of $300.

His pedigree may be found in the American Turf Register.

Batavia N. Y., April 1, 1852—2t.* EDGAR C. DIBBLE.

Imported Consternation.

THIS celebrated thoroughbred horse will stand, this season, as heretofore, at the farm of the subscriber near Syracuse. Terms $10, payable in advance, for which a receipt will be given, promising to refund the money, if the mare is proved not to have got in foal, and provided also she is left with the subscriber, or regularly returned to the horse during the season, or until the groom is satisfied she is in foal. Pasturage of the best character furnished at 3s. per week. No mares taken except at the risk of the owners. in all respects.

Syracuse, April 1, 1852—3t. J B. BURNET.

Bloodgood Nursery,

Flushing, Long-Island, near N. Y.

THE Proprietors of this well established Nursery, offer for sale the largest and finest stock of Trees, &c., ever offered by them, consisting of every variety of

FRUIT AND ORNAMENTAL TREES,
Evergreens, Grapevines, Flowering Shrubs, Hedge Plants,
Raspberries, Strawberries, Gooseberries, &c. &c.

Orders sent to them at 244 Pearl street, New-York, (where Catalogues may be obtained gratis,) will receive immediate attention, and the Trees packed with great care for transportation.

New-York, April 1—1t. KING & RIPLEY.

Old Rochester Nursery.

20,000 Osage Orange plants, at $10 per thousand, proves perfectly hardy here, and makes excellent orchard fence.

30,000 Northern Spy apple trees.

5,000 Giant Rhubarb, very low by the thousand.

3,000 fine dwarf pear of large size, together with a large general assortment of hardy Orchard and Garden Fruits and Ornamental Trees, Shrubs, Dahlias, and general collection of bulbs, box edging, &c. &c.

The assortment is very complete, comprising the leading hardy items requisite for elegance or utility. Orders carefully filled, packed, &c. for any distance.

Nursery, corner of Clinton and Norton streets, Office 36 Front treet, Rochester, N. Y. Catalogues gratis.

April 1—1t. SAMUEL MOULSON.

Evergreen and Deciduous Forest Trees,

FURNISHED to order, at short notice, by WM. MANN, Bangor, Maine—among which are,

American Arborvitæ.
Double and single Spruce.
Double and Silver Fir.
White Drooping Hemlock.
Hackmetache or Larch.
White and Norway Pine.
High Cranberry.
Moosewood.
White and Yellow Birch.
Sugar and White Maple.
Black Walnut.
Red Ash.
American Mountain Ash.
White and Red Beech.
American White Elm.
Balm of Gilead, &c. &c.

The subscriber having been for many years engaged in raising Fruit and Ornamental Trees, and especially in executing orders for the above named Forest Trees—is prepared to furnish superior trees of all sizes, from seedlings, to as large as can be safely taken up and transported.

Nurserymen who intend to replenish, and others about to ornament cemetery lots, lawns, avenues, &c., enhance their interests by buying of "first hands." The amount of business that I do, and the facilities that I have, enables me to carry out my motto, "as good as the best, and cheapest." Prices for specified kinds, quantities and sizes, furnished per mail, postage pre-paid. WM. MANN.

Bangor, Maine, April 1, 1852—2t.

Pulverised Charcoal,

PREPARED for Agricultural purposes, put up in barrels, at $1 per barrel, including the package. In bulk $18.75 by the 100 bushels. For sale at the State Agricultural Warehouse.

LONGETT & GRIFFING,
April 1—2t. No. 25 Cliff street, New-York.

Stowell's Evergreen Corn.

WE have a small quantity of this valuable corn, raised by Prof. J. J. Mapes,—price $1.50 per quart.

LONGETT & GRIFFING,
April 1—2t. No. 25 Cliff street, New-York.

Fancy Fowls.

THE subscriber has for sale several pair of Cochin Chinas, Shanghaes, Dorkings, Golden Pheasants, Silver Pheasants, and Frizzled Fowls.

Any of the above breeds, cooped and delivered in Albany or New-York city, free of charge.

All orders promptly executed. W. H. SOUTHWICK.

New-Baltimore, Greene Co., N. Y., April 1—1t.*

A Productive Farm for Sale.

THE subscriber, unable to give his active attention to the farm he has cultivated for many years, offers the same for sale; either the whole or a part.

Two hundred and eighty-five acres are cultivated—either cropped with grain, in meadow, pasture, or in preparation for spring crops. Sixty-five acres are in thrifty wood.

This farm obtained the state premium, and a full description may be seen in the State Society's Transactions for 1847.

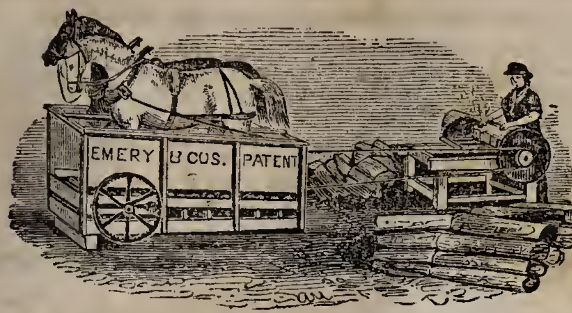
Being in a system of rotation, cropped and seeded, a purchaser will find all necessary work prepared for the season, admitting of possession whenever desirable.

The dwellings and buildings are comfortable, sufficient, and in good order.

A reasonable portion of the purchase money may remain on good security.

For other information and terms, apply to Messrs. Hy. & Wm. Delafield, Front-st., New-York; to B. B. Johnson, Esq., Agricultural Rooms, Albany, or to the subscriber on the premises, at Oaklands, near Geneva. J. DELAFIELD.

April 1, 1852—1t.



EMERY & COMPANY,

Sole Manufacturers for the United States,
OF THE
New-York State Agricultural Society's
FIRST PREMIUM

RAILROAD HORSE POWER,

Patented by H. L. EMERY, February 24, 1852.
Manufactory, on Hamilton, Liberty and Union Streets; Warehouse and Sale Rooms, Nos. 369 and 371 Broadway,
ALBANY, N. Y.

THE above Horse Powers have been awarded the highest Premiums at the Fairs of the New-York State Agricultural Society in 1850, and again in 1851; also, the highest Premium at the Michigan State Fair, at Detroit, Mich., in September, 1851, where a majority of the Committee owned and were using Wheelers' Powers on their farms, having purchased them previous to seeing our own; also a Gold Medal at the American Institute in 1851. It was also exhibited at the State Fairs of Ohio, Maryland, and Pennsylvania, and received the highest awards which could be given by the rules of their Societies. In every case, it has been in competition with all endless chain Powers of any note in this country.

Over SIX HUNDRED setts of the above Powers were sold and put in use from June to January last, not one being returned or failed.

To enable the public to distingush the above Horse Power from all others, we here show its principal, and most important parts, by diagrams and references—beside like diagrams and references of the Rack and Pinion Power, as made by ourselves, Wheelers, and others; and also the Rack and Pinion with epicycloydal teeth, which has long been successfully used in this vicinity, and which, with our recent improvements, in its adaptation and application to our Horse Power machinery, places it the first on the list of Rack and Pinion Powers.

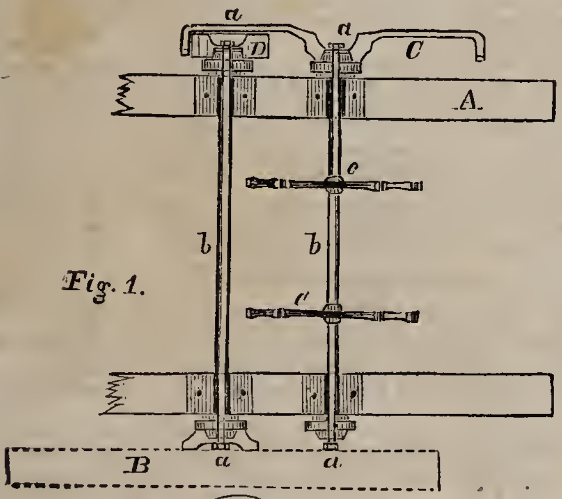


Fig. 1.

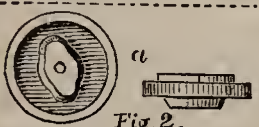


Fig. 2.

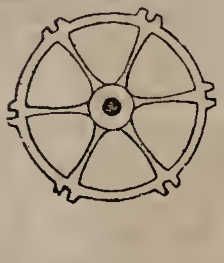


Fig. 4.

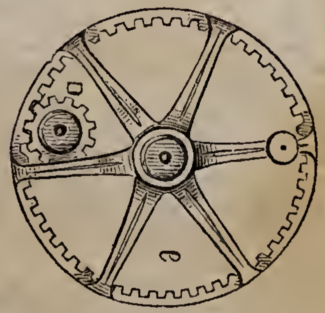
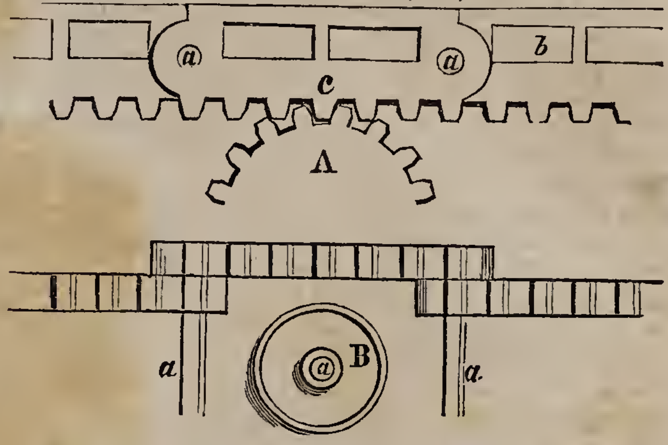


Fig. 3.

Top view of the Running Gear, and a portion of the frame work of H. L. EMERY'S Patent Changeable Railroad Horse Power.

Fig. 1. A A.—Main sills or timbers of the power supporting the shafts.
B.—Band pulley upon one of the shafts.
D.—Pinion, or small gear, upon the same shaft with pulley.
C.—Converge or internal gear upon the main shaft, and working into and over the pinion.
b.b.—Main and counter shafts of power.
c.c.—Reels upon the main shaft, which support the endless flooring in its circuit, and carry the shaft.
a.a.a.a.—Couplings upon the ends of the shafts, fitting all the pullies and gears.

Fig. 2. Shows a side and edge view, (enlarged,) of the couplings.
Fig. 3. Side view of converge or internal gear and pinion.
Fig. 4. Side view of one of the two reels, c.c., on the main shaft.

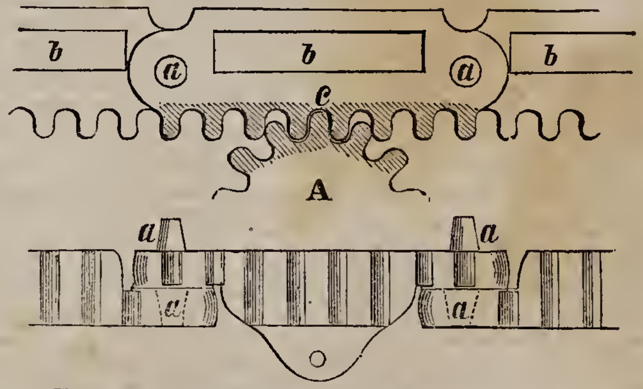


Common Rack and Pinion Power, as manufactured by ourselves, Wheelers and others.

B.—Side view of one of the 72, (or 36 on each side,) small truck or friction wheels, which traverse with the endless flooring—being about 3¾ inches diameter.

C.—Side view of one of the 72, (or 36 on each side,) links or segments of the chain, each of which are six inches long, as seen connected with others. a.a.a.a.—The eyes of the links and small rods crossing the power and extending through the links, and far enough outside to receive the small trucks.

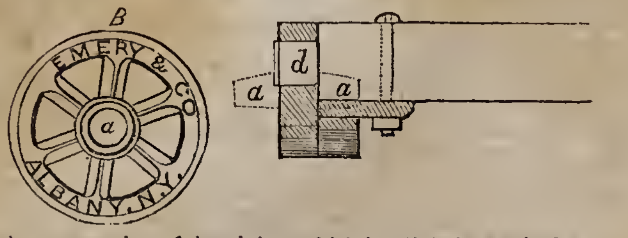
A.—Side view of a section of one of the pinions or small cog wheels, two of which are placed upon the main shaft, and receive the motion and force from the cogs on the links of the chain. This pinion is about four and a half inches diameter, and the hand pulley is used upon the same shaft, which for threshing, is four feet diameter. The lower view represents the teeth or cogs, as seen with links inverted.



Emery's Improved Patent Rack and Pinion Power, with Epicycloydal teeth.

c.—Shows a side view of one of the links or sections of the chain, of which there are but sixty, or thirty on a side, and are each seven inches long; every alternate link is cast with dowels, a.a.a.a.a.a., projecting each side; those on the inside connecting with the other links, while those on the outside receive the truck wheels, thus avoiding the necessity of the small shafts, and expense of fitting up. The eyes of the links and truck wheels are cast upon steel chills—making a perfect, and hard smooth surface, which will not wear or break—while the dowels are sufficiently large and strong to withstand more than the cogs themselves.

The lower edge of each link is widened equal to the face of the pinion, and the cogs made to extend the whole width of the pinion, as shown in the lower cut, representing the link inverted, presenting double the strength and driving surface, as shown in the last kind; every alternate link is confined to the plank flooring by a small screw bolt passing through a flange upon the inside of the link, and under the plank itself.



A.—shows a section of the pinion, which is a little larger in diameter than the last—the teeth of which are epicycloydal in form—as are those on the links working into them—which is acknowledged by all mechanics and engineers to be the strongest and most perfect form of teeth, and works with less friction and wear, as the driving surfaces present to each other a rolling, instead of sliding friction; this kind of teeth, on account of their rounded form, work much deeper into each other, and have little or no inclination to lift out of gear.

The last cut shows the construction of the truck wheels, which are $1\frac{1}{4}$ inches larger in diameter, and revolve on larger circles at the ends of the power—giving them an advantage over the smaller wheels. A section of a link is shown with the end of the flooring attached; these planks are all one inch wider, and consequently wear up by use much closer, before bending or breaking under the weight of the animals. As a Rack and Pinion Power, the latter has every advantage over the common kinds in use; is manufactured at a less cost; is equally strong and durable, and is more easily handled, as its weight is some two hundred pounds less.

Either of the above kinds of powers are offered to the public, each upon its own merits, with a full warranty as to workmanship, materials, and operation, (and with a guarantee of right of using in all parts of the United States,) subject to be returned within three months—and purchase money refunded. For prices, &c., see Illustrated Catalogue, furnished gratis on application, or by mail.

The first on the list is the highest in cost, and is found preferable in all cases, and under all circumstances. The power of the revolving platform being applied to the main shaft, by means of reels with larger diameters than the pinions used in the Rack and Pinion powers, the stress upon the several parts is in no way as great—and the liability of wear or breakage, from use or accident, is removed. The whole of the gearing consists of less than one-seventh the number of cogs in the Rack and Pinion Power; and these are wholly removed from under the horses to the outside of the power—free from dirt, dust, &c., and always easily kept in order or cleaned, which is an advantage over all Rack and Pinion Powers. This power has also the advantage of the changing of force and velocity to accommodate it to any variety of work, without any additional cost or danger to the gearing or other parts. When the main shaft runs but fifty-six revolutions per minute, the diameters of the gears are such as to increase or decrease the velocity to two hundred and twenty-four, or as slow as fourteen revolutions per minute, when the animal, (either horses or oxen,) walk but two miles per hour—being about two-thirds the travel which is necessary with the Rack and Pinion Powers, to produce the same effect. This last fact is one of its principal features, and of the greatest importance to the farmer. The gearing, as well as pullies and couplings, all agree, and can instantly be transposed—each to each, and side to side. In this power the centers of motion of the gears are always in the same position to each other—requiring no guard or binding track over the chain above the pinions, to keep the gears together, as is absolutely necessary with all rack powers, and which serve to check the force of the power; and as the driving faces of the teeth on the rack and pinions become worn off, the loss of force increases, until they eventually stop, break, or slip by each other. The length of the sections or links of the chan, as also the width of the planks of the flooring, are same as in the Improved Rack Power last described. With the above advantages, together with the epicycloydal form of teeth, adopted this season in its construction, the superiority of this power is readily seen.

This power is admirably adapted for driving Threshing Machines, Circular Saws, Cotton Gins, as also Machine Shops, Elevators, Ferry-boats, Discharging and Loading vessels, Pile-driving, Cross-cut sawing, Pumping, Grinding grain, Churning Butter, Cutting Hay and Stalks, Shelling Corn, Grinding Apples, &c. The angle of elevation necessary to operate this power, is never greater, but often less than either of the others here described, and which is inside of one and a half inches to the foot, with horses weighing 1000 pounds each, and without any harness. It has also an admirable arrangement for adjusting and tightening the chain, *not possessed by either of the others*—together with an improved brake for stopping the whole instantly—all within the power. and independent of the band and pulleys, and does not require to be changed, when gears and pulleys may be. The pulley used for threshing, with this power, is but three feet diameter, to effect the same as a four foot wheel does with the Rack and Pinion Power

In all cases the shafting of all machinery manufactured by us is made to run in Babbetted Boxes, they being the most durable and perfect box in use—and not generally used by other manufacturers.

Devon Bulls for Sale.

THE subscriber offers for sale, two young Devon bulls, called "Washington" and "Ajax."

Washington was dropped the 28th March, 1851. Sire, bull Molton—grand sire, celebrated bull Major, bred by R. C. Gapper, and now owned by Lewis G. Morris, Esq. Major took the first premium at the State Fair at Albany, in 1850—and is admitted to be the best Devon bull ever brought into the United States.

Dam of Washington, cow Beauty—grand dam, cow Sophia—both bred by Ambrose Stevens, Esq., and both received the highest premiums in their respective classes at the State Society's Shows, in 1849 and 1850.

Bull Ajax, was dropped the 7th of August, 1851. Sire, bull Molton—dam, cow Ruby.

Ruby was bred by Mr. Cowles of Farmington, Ct., and was sired by bull Rover, bred by Lewis F. Alllen, Esq, Black Rock.

Price for Washington $75, for Ajax $50, or will be exchanged for Heifers of equal age and pedigree. Address the subscriber at Greenwich, Washington co., N. Y. LE ROY MOWRY.

April 1—3t.

Prouty and Mears' Plows.

A LARGE assortment can be found at the State Agricultural Warehouse, No. 25 Cliff street, New-York.

March 1—2t. LONGETT & GRIFFING.

Ketchum's Patent Mowing Machine.

THE subscribers having entered largely into the manufacture of the above Mowing Machine, are now prepared to supply orders for the same from all parts of the United States, and hesitate not to sell the Machine under the following

WARRANTY.—On lands free from obstructions, we warrant our machide to cut and spread from ten to fifteen acres per day, (of any kind of grass,) with one span of horses and driver, and do it as well as is done with a scythe by the best mowers.

The Price of the Machine is $110, with extra cutter, &c.

Buffalo, April 1—1t.* HOWARD & CO.

TESTIMONIALS.

Buffalo, Erie co., N. Y.

Dear Sir:—Having had the pleasure of witnessing the performance of your Mowing Machine, yesterday, in Col. Bird's meadow, below Black Rock—(the surface of which was quite uneven,)—we assure you that we consider it one of the most valuable Agricultural implements ever brought into use. The grass was cut better than it could have been done with a scythe, and with a facility and expedition truly astonishing. We have no hesitation in saying it is all a farmer could desire for cutting his grass.

LEWIS F. ALLEN, President N. A. State Ag. Society.
O. ALLEN, Mayor of the City of Buffalo.
T. C. PETERS, ESQ.
HON. GEO. W. PATTERSON.

Buffalo, December, 1851.

We have used Ketchum's Mowing Machine during the past season, and find it a most valuable improvement in cutting grass. On meadows free from stumps and tolerably smooth, it will cut, with a good team and competent driver, from six to eight acres in half a day, better and more even than it can be done with a scythe, and when done, the grass is left evenly spread on the ground where it grew. We confidently recommend it to the patronage of the farming community.

THOMAS C. LOVE.
SAMUEL TWICHELL.
MORGAN BUTLER.
A HITCHCOCK.

East Genoa, Cayuga co, N. Y., August, 1851.

Dear Sir:—The Mowing Machine I purchased of you last June, has more than answered my expectations. I find it will work upon ground quite uneven, and there is less risk from injuring it from stones than most persons would suppose who have no experience in its use. I find it will cut all kinds of grass, and do it well, when properly managed. Persons who have large quantities of grass to cut, with tolerably smooth ground, will find it much to their interest to use one of these machines. HORACE LEAVENWORTH.

Messrs. Howard & Co.—Sirs:—I have cut the past season 120 acres with one of your grass cutters, and I do say it is one of the greatest inventions of the age for labor-saving. It cuts very close, and is easily kept in cutting order. It will cut $1\frac{1}{4}$ acres per hour of grass that will yield two tons and over to the acre. Since using it, I consider it indispensable on a farm like this. H. MOUNT.

Tifft's Farm, Black Rock, February, 1852.

Morgan Horse Trustee.

THIS horse will stand, (for a limited number of mares,) the present season, at the Farm of the subscriber, within five minutes drive of Union Village, Washington county, N. Y.

Pedigree of Morgan Trustee.

Sired by the old Gifford Morgan—gr. sire, the Woodbury or Burbank Morgan—gt. gr. sire, the original Justin Morgan horse.

His dam was sired by old Morgan Bulrush—his gr. dam by Morgan Fortune—his gt. gr. dam by the original Justin Morgan.

The dam of Morgan Fortune was sired by the original Justin Morgan.

Certificate.—We hereby certify the above to be a correct pedigree of Morgan Horse Trustee, bred by us. and this day sold to Mr. Mowry of Washington county, N. Y. Signed, Walpole, N. H., March 5th, 1852.

Frederick Vose.
Benjamin Gates.

It will therefore be seen that Morgan Trustee is of exactly the same degree of Morgan blood, as was the old Gen. Gifford Morgan. The old Gifford being dead, Trustee is the highest blooded Morgan stud now living.

He is a dark mahogany bay color, with black main and tail; of fine form and action, and will be four years old the 16th day of May, 1852. Terms $10 to ensure a foal.

Mares disposed of before the usual time of foaling, will be considered in foal, and charged accordingly. LE ROY MOWRY,

April 1—3t. Greenwich P. O., Washington co., N. Y.

Horse Gen. Gifford Morgan,

WILL stand, for a limited number of mares, the present season, at the Farm of the subscriber, within five minutes drive of Union Village, Washington co., N. Y., and at the same stable with Morgan Horse Trustee.

Gifford Morgan, was bred by Wm. Arnold of Walpole, N. H. He is three years old the 24th day of May, 1852—is a horse of splendid form and action, and a perfect pattern of his celebrated sire. His color is a beautiful dapple chestnut. He was sired by the old Gen. Gifford Morgan. His dam is one of the best mares in that section of country, and whose colts invariably bring exorbitant prices.

Terms $10, to ensure a fold. Mares disposed of before the usual time of foaling, will be considered in foal and charged accordingly

LE ROY MOWRY,
April 1—3t. Greenwich P. O., Washington co, N. Y

N. YORK AGRICULTURAL WAREHOUSE.

A. B. ALLEN & CO.,

189 *and* 191 *Water Street, New-York.*

PLOWS of a great variety of patterns and different sizes, calculated for sward and stubble land, wet meadows, and recently drained swamps where roots abound. Among these plows, also are the deep-breaking-up, flat-furrow, lap-furrow, self-sharpening, side-hill, double-mould-board, corn, cotton, cane, rice, and subsoil with single or double wings.

HARROWS, triangular, square, Geddes, and Scotch.

ROLLERS, with iron sections one foot long, and of different diameters. These can be arranged on an iron shaft for any required width.

CULTIVATORS of upwards of twenty different kinds, steel tooth and cast iron.

SEED SOWERS of six different kinds and prices.

HORSE POWERS, endless chain and circular, of wood and cast iron.

THRESHERS, with or without Separators.

GRAIN MILLS of cast iron, and burr stone, to work either by hand, horse or water power.

CORN SHELLERS, single and double, large and small cylindrical to work by hand or otherwise.

STRAW CUTTERS, spiral, straight, or circular knives.

VEGETABLE CUTTERS for turneps and other roots.

Together with a great variety of all other Agricultural and Horticultural Implements kept in the United States, such as Hoes, Shovels, Spades, Rakes, Manure and Hay Forks, Grain Cradles, Scythes, Snaths, &c. &c.

CASTINGS of all kinds for Plows, Cotton Gins, and Sugar Rollers.

WAGONS and *CARTS*, for horse, ox, or hand.

STEAM ENGINES for farm and other purposes.

Our implements occupy three large stores, and we believe they make up the largest and most complete assortment in America. In addition, we have a machine shop employing upwards of one hundred men, where any articles in our line can be made to order.

A. B. ALLEN & CO.,
Jan. 1, 1852—tf. 189 and 191 Water st., New-York.

United States Agricultural Warehouse and Seed Store.

THE subscribers solicit the attention of the public to the large and varied assortment of Agricultural and Horticultural Implements, Field, and Garden Seeds, which they have constantly on hand, and offer for sale at the lowest prices, and on the best terms. Persons in want of any articles in their line, would do well to call upon them before purchasing elsewhere. A descriptive Catalogue will be sent gratis upon application, post-paid.

N. B. Guano, Bone Dust, and other fertilizers.

JOHN MAYHER & CO.
Dec. 1—tf. No. 197 Water-St., New-York.

Union Agricultural Warehouse and Seedstore.

RALPH & Co., No. 23 Fulton Street, New-York, near Fulton Market,

DEALERS in all the most approved Agricultural and Horticultural Implements, Imported and American Field and Garden Seeds, Ornamental Shade and Fruit Trees, Guano, Bone Dust, Pondrette, &c. Wrought Iron Plows, Trucks, Barrows, &c., &c., always on hand. Also the Excelsior, or California Plow.

New-York, March 1, 1852—3t.

THE AMERICAN MUCK BOOK,

A complete Manual of Manures. Price $1.

C. M. SAXTON, agricultural book publisher, has just published—the American Muck Book—treating of the Nature, Properties, Sources, History and Operations of all the principal Fertilizers and Manures in common use, with specific directions for their preparation, preservation and application to the soil and to crops, as combined with the leading principles of practical and scientific Agriculture, drawn from authentic sources, actual experience, and personal observation. Illustrated with engravings. By

D. J. BROWNE.

Author of Sylva Americana, a Treatise on Forest Trees, American Poultry Yard, &c.

C. M. SAXTON,
Agricultural Bookstore, 152 Fulton street, New-York.

The following is from Dr. C. T. Jackson, of Boston, the best Agricultural Chemist in the U. S.:—

[COPY.]

BOSTON, November 6th, 1851.

Dear Sir: I have the pleasure of acknowledging the receipt of a copy of the "American Muck Book," recently published by you, and edited by Mr. D. Jay Browne.

From an attentive examination of this book, I have come to the conclusion that it is one of the best works extant, on the principles of scientific agriculture, and the best compendium of our most recent knowledge of the nature of manures and their adaptation to particular soils and crops. It cannot be expected that a single volume could possibly contain the whole sum of chemical knowledge applicable to the science of chemistry; but on looking over the closely printed and compact tables of analyses, and the abundant formulas, which this publication contains, I could not fail to be surprised at the industry manifested in preparing it. I was also gratified to find it so well adapted to the American system of husbandry, and so practical in its character. Its copious and accurate index adds not a little to its value.

I shall certainly recommend it to my agricultural friends as a very useful book, and one necessary to every scientific farmer. I am, very respectfully, your ob't. servant,

CHARLES T. JACKSON, State Assayist, &c. &c.
To C. M. SAXTON, Esq., New-York. Jan. 1, 1852.—3t

To Fruit Growers.

PERSONS wishing to procure extra sized Fruit Trees, or Trees in a bearing state, are respectfully invited to visit the Nurseries and make a selection.

60,000 Fruit and Ornamental Trees.

The subscriber offers for sale his Entire Stock of Fruit and Ornamental Trees, Evergreen Shrubs, &c., in his various Nurseries in *Roxbury* and *Dorchester*. The collection embraces most of the varieties of the *Pear*, *Apple*, *Cherry*, *Plum*, *Peach*, and other Fruits that are *worthy* of cultivation. Also *Quinces*, *Gooseberries*, *Currants*, *Raspberries*, *Strawberries*, *&c.*

Extra sized *Pear Trees*, in a bearing state, can be supplied at reduced prices.

20,000 *Buckthorns*, Rose Trees, Honeysuckles, Hawthorns, &c.

Scions, in large and small quantities, from fruit bearing Trees.

The whole for sale at the lowest market price.

SAMUEL WALKER,
March 1—2t. Eustis Street, Roxbury.

⁂ 3,500 Imported Fruit Trees for sale.

☞ Walker's Seedling Staminate Strawberry—price $1 per dozen.

Field and Garden Seeds,

GROWN expressly for our sales, suitable for any climate in the United States. A large assortment may be found at

LONGETT & GRIFFING'S.
March 1—2t. No. 25 Cliff street, New-York.

Seed Corn.

PURE Dutton Seed Corn for sale, at $1 per bushel.

B. B. KIRTLAND, Greenbush,
March 1, 1852—2t. opposite Albany.

SUBSOIL PLOWS.

THE subscribers offer for sale an improved Subsoil Plow made under the advisement of Prof. J. J. Mapes, and free from the objections urged against those formerly in use.

The wearing parts are so arranged that they may be easily and cheaply renewed, while the amount of force requisite to move them is less than half that required by those previously made. Price $8.50 and $9. For sale by

LONGETT & GRIFFING,
March 1—2t. No. 25 Cliff street, New-York.

Wood's Renovating Salts, or Bone Manure.

WE are now receiving large quantities of this valuable Manure, put up in barrels, which we will sell at one cent per pound. This article is made from the following ingredients, viz.

Charcoal, Bone dust, Plaster, Potash, Calcined Charcoal, Glauber Salts, Saltpetre, Oil of Vitrol, Salts of Ammonia, Gas Liquor, and Bullock's Blood.

LONGETT & GRIFFING,
State Agricultural Warehouse and Seed Store,
March 1—2t. No. 25 Cliff street, New-York.

GUANO.

WE have now received our supply of Peruvian Guano, put up in bags, averaging 160 lbs each.

Bone Dust put up in barrels, sawings, turnings, and crushed, $2.25 per barrel.

Bone Coal, Poudrette, Plaster of Paris, Sugar-house Scum, Potash, &c. &c. For sale by

LONGETT & GRIFFING,
March 1—2t. No 25 Cliff street, New-York.

Albany Tile Works.

Corner Patroon and Knox Streets, Albany.

THE subscriber will furnish to Agriculturists, of the most approved patterns, Drain Tile suitable for land drainage, of a superior quality, over one foot in length, 3 to 4½ inches calibre, from $12 to $18 per 1000 pieces. They are formed to admit the water at every joint, draining land from 12 to 20 feet each side of the drain, being the cheapest and most durable article used.

Tile sufficiently large for drains around dwellings, at $4 and $8 per 100 pieces, being cheaper and more durable than brick drains.

The great importance of thorough drainage is daily becoming more apparent. Orders from a distance will receive prompt attention.

March 1—6t A. S. BABCOCK, Albany.

1,000 Agents Wanted.

HEADLEY'S LIFE OF KOSSUTH.

JUST PUBLISHED, the Life of LOUIS KOSSUTH, Governor of Hungary, with notices of the Distinguished Men and Scenes of the Hungarian Revolution. To which is added an Appendix, containing Kossuth's Address to the People of the United States; and the most important of the addresses, letters, and speeches of the Great Magyar Chief. By P. C. Headley, author of "Life of Empress Josephine," "Life of Lafayette," etc., with an introduction by Horace Greely. In one elegant 12mo volume of 461 pp., with an accurate steel portrait. Price $1.25.

N. B. Agents wanted in every county in the United States, (not already occupied,) to sell the above popular work. It is believed that almost every *reading* family will be glad of the opportunity of possessing the Life and Speeches of the noble Hungarian. Such is the present indication from the unparalleled sale of the work.

Address DERBY & MILLER, Auburn, N. Y.

A single copy sent by mail, *free of postage*, on receipt of the price, post-paid. March 1—2t.

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Needham's White Blackberry.

THIS new variety of the Blackberry is intended expressly for the Garden, being hardy, vigorous, and extremely productive.

A single plant of four years growth the past season, produced 11 quarts of good fruit, without extra care or cultivation.

The plants can be sent to any part of the country, packed in boxes, at $10 per dozen, or single plants $1.

Circulars giving full information, will be sent with the plants.

Danvers, Mass, April 1, 1852—1t.* J. SHED NEEDHAM.

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Macedon, Wayne county, N. Y.

ALL *Fruit Trees sold at this Nursery are propagated from trees proved in bearing*, and a selection of the best sorts made out of nearly *one thousand* proved varieties.

A large collection of APPLE TREES includes Gravenstein, Early Joe, Northern Spy, Baldwin, Rhode Island Greening, Strawberry, Porter, Fall Pippin, Swaar, and many others.

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RASPBERRIES—Franconia, Fastolff, Cretan, Red Antwerp, &c.

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ORNAMENTAL TREES—Horsechestnuts, European Larch, Mountain Ash, Honey Locust, Weeping Ash, Ailanthus, Magnolia, &c

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CLIMBING ROSES—Queen of Prairies, Baltimore Belle, Crimson Boursalt, Queen of the Belgians, Pallida, Caradori Allan, Mount Joy, &c.

HYBRID PERPETUAL ROSES—La Reine, Ma'ame Laffay, Baron Prevost, Rivers, and many other brilliant sorts.

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HERBACEOUS PERENNIAL PLANTS—a fine and very select collection, including many of the most splendid PŒONIES, as Pottsii, Reevesii, Humei, Whitleii, Fragrans, &c.; PHLOXES, including Van Houttii, Picta, Speciosa, Breck's, Fleur de Marie, decussata, &c.; SPIRÆAS, comprising lobata, aruneus, japonica, &c.; IRIS, many fine sorts; Lythrums, Dictamnus, Delphiniums, Aconites, Baptisias, Campanulas, Funkias, Yuccas, &c. &c.

Catalogues gratis—orders with remittances promptly filled—packing done in the most secure manner for any distance by canal or railway.

April 1—1t.

Fruit Trees for Sale.

THE subscriber offers for sale, this spring, a very large and fine stock of trees embracing the most choice and leading kinds. All of which will be sold on the lowest terms.

A large quantity of two year old Baldwin apples and Seckel pear trees, (preferable where freight is much of an item.) Catalogues sent to all applicants. CHARLES DUBOIS.

Fishkill Landing, April 1—1t.

Seneca Lake Highland Nurseries,

Catharine, Chemung co., N. Y., near Havana Depot, N. Y. and Erie Railroad.

A COMPLETE assortment of Nursery articles, wholesale and retail. Great inducements to Eastern, Southern, and Western dealers. Packages amounting to $10 delivered at New-York and Dunkirk, or any intermediate station on the New-York and Erie Railroad, free from charges to the purchaser.

Price and Descriptive Catalogues furnished gratis by mail.

April 1—1t. C. E. FROST.

Fruit and Shade Trees.

FOR sale at *Mount Ida Nursery, Troy, N. Y.*, a choice variety of Fruit Trees, comprising Apples, Pears, Peaches, Plums, and Cherries, of the most approved kinds.

Currants, Gooseberries, Raspberries, Grapevines and Strawberries, of the choicest varieties.

Also a good variety of shade trees, consisting of Scotch Elm, English Sycamore, Linden, Horse Chestnut, Mountain Ash, Larch, Oak, &c. Evergreen, Privet and Buckthorn, for Hedges.

Rhubarb and Asparagus Plants, &c. Catalogues and other information can be had of the Nurseryman. JOSEPH CALDWELL.

Troy, April 1, 1852—1t.

Linnæan Botanic Garden and Nurseries,

Flushing, New-York.

WM. R. PRINCE & CO., wishing to retire from business, and to use 50 acres of their grounds for building lots, will sell the whole or any part of their stock, at liberal rates; and if any parties wish to continue the Nursery business on their own account, will advance $8,000 to $10,000 for the purchase of the land in this vicinity, they allowing us rental therefor; and a very suitable plot can be obtained at this time. It would be useless for any person to undertake, unless they have $5,000 to $10,000 in cash. April 1—1t.

Fruit Trees---Special Notice.

THE proprietor has still remaining in his Nurseries, a large number of thrifty *Fruit Trees*, which must be removed the present year, in order to complete the improvements now in progress on his estate.

The *General Collection* contains many thousands, and from which selections can be made of almost every approved variety extant.

Special Cultivation has been bestowed on the *Pear*, and trees of *extra size, with fruit buds*, can be supplied, of many of the popular sorts, and at moderate prices.

Also, most of the new varieties of Pears, Cherries, Plums, Raspberries, Currants, Strawberries, and other fruits, and at rates less than is generally charged for novelties.

Scions for exportation and the home trade, can be had from fruit bearing Trees, thereby ensuring correctness of nomenclature.

Selections, when desired, founded on the experience of many years, will be made by the proprietor, and which will seldom fail to please the correspondent.

Address—"The Superintendent of the Nurseries, at Hawthorn Grove, Dorchester, Mass.," to the care of the subscriber,

MARSHALL P. WILDER, No. 2 Pearl-st., Boston.

N. B.—Grove Hall Coaches leave No. 11 Franklin-st. four times each day. April 1, 1852—1t.

Fowls and Eggs.

VERY handsome specimens of the Albany Dorking, are for sale by the subscriber. Also, eggs of the above and the following varieties.—

Shanghae, Perly stock.
Santa Anna, game.
Golden Poland.
Java Bantams.

The above may be relied upon as genuine. E. E. PLATT.

Albany, April 1, 1852—1t.

PERUVIAN GUANO

AND other Fertilizers. Several hundred tons of first quality of Peruvian Guano, constantly on hand for sale.

Also, BONE DUST, PLASTER OF PARIS and POUDRETTE.

A. B. ALLEN & CO., 189 and 191.
Water-st., New-York.

Jan. 1—tf.

THE CULTIVATOR

Is published on the first of each month, at Albany, N. Y., by

LUTHER TUCKER, PROPRIETOR.

$1 per Ann.—7 Copies for $5—15 for $10.

☞ All subscriptions to commence with the volume, (the Jan. No.,) and to be PAID IN ADVANCE.

ADVERTISEMENTS.—The charge for Advertisements is $1 for 12 lines, for each insertion. No variation made from these terms.

THE CULTIVATOR.

TO IMPROVE THE SOIL AND THE MIND.

NEW SERIES. ALBANY, MAY, 1852. VOL. IX.—No. 5.

The Forces of the Farm.

SUCCESS in any business requires a thorough knowledge of the means and materials under employ. Place the levers of a locomotive in the hands of one who had never before seen this powerful machine, and instead of being able to drive it with the speed of the wind and the precision of mathematics, he would be sadly puzzled to know what first to do with his important charge. What could a plowman do if required to superintend a cotton factory? Or a blacksmith the machinery of a wholesale merchant? What could a shopkeeper accomplish if placed in charge of a thrashing machine, a horse-reaper, or a subsoil plow? We should all doubt the sanity of the man who would send for a lawyer to set a fractured limb, although he might point out to the nicety of a hair the rights, privileges, and liabilities of John Doe and Richard Roe, and their legal representatives. But it needs no argument to show the absurdity of looking for knowledge where it is not to be found; it is not, however, quite so plain to every one, that no business can be well conducted without thorough knowledge of its parts. The idea that men succeed by a sort of lucky guessing, instead of a thorough mastery of facts and principles, is quite too prevalent.

We remember some years ago, as an example, that a newly invented water-wheel was highly recommended to the public, as possessing, with an equal amount and fall of water, three times the power of the best overshot wheel. The wildness of such a claim would have been instantly evident, to many who were deluded by it, had they only known, or reflected, that the principles of gravity are such, that one hundred pounds of water descending ten feet, could never, by the most cunningly invented machine, be made to elevate more than a like quantity of water to a similar height, or do its equivalent in any other way. The heathen poet, who, in his historical fictions, spoke of wine that was twenty times stronger than common, that is, four times stronger than pure alcohol, did not commit a greater blunder, than many do in their estimates, or rather vague conjectures of the power of machinery.

Inventors of farm machines, like most other men, resemble very much a flock of sheep, and follow where some one is bold enough to lead. Hence we see that they have not struck off so much into every possible avenue, as they have travelled with the mass in certain beaten tracks. We have a plow invented for nearly every county in the northern states, but not half a dozen well constructed harrows; we have had for a long time, a vast number of thrashing machines, but until very lately, scarcely a reaping machine was known The World's Fair, it is true, has turned the tide of fashion in the latter direction, and we shall now soon have them by scores. We have been supplied with as great a variety in churns, as in the dishes of a French cook; yet a good milking machine, a thing of much greater consequence, (counting the time consumed,) has never yet been made. We have often wondered why Yankee ingenuity had never yet devised a single good *mangle*, although hours are consumed every week, in nearly all families of this broad country of 20 millions, by the hard labor of the ironing table; yet sausage-stuffers, and sausage-mincers, paring-machines and pepper-grinders, have all had a large share of attention, although perhaps used but once a year.

We cannot but believe, that one great reason of the deficiency in these, and in many other particulars, is that farmers themselves do not adequately comprehend what is needed, and what may be accomplished. They do not possess a sufficient knowledge of the principles of machinery, in many instances, to qualify them for judging of the merits of new machines; to know how much and no more, the best application of force can accomplish; and especially to enable them to judge with some degree of confidence, whether inventors have nearly reached perfection in any particular point, or whether there yet remains a great field unachieved before them. It is here, if anywhere, that a thorough knowledge of means and materials, of facts and principles, is needed, to enable every one to conduct his business understandingly. We will furnish a few examples, by way of explanation.

The crow-bar is simple and effective, and so far as it goes, may be considered as having about reached perfection. It possesses but little friction, and a given force applied to it is wholly applied, without any loss, to the desired end. How is it with the reaping machine? One man, with the best hand-machine, will cut two and a half acres of wheat in a day; a horse is reckoned to the work of five men, consequently a two horse reaper, deducting one-fourth for the friction of the parts, should do seven and a half times as much as a single hand, or nineteen acres in a day, an amount which has been nearly reach by the best reapers. They cannot, therefore, be expected to be greatly improved in the quantity, but rather in the perfection of their work, and in cheapness and simplicity. Apply the same kind of calculation to the plow, and the reader cannot but be surprised at the great field yet open for improvement. A cubic foot of earth weighs about 125 pounds; a team turning a slice a foot wide and six inches deep, and moving four feet per second, lifts two cubic feet of soil or 250 lbs. in each second, about on an average seven inches high. Now, a good American horse has been found in ordinary work to lift 100 lbs. at the rate of four feet per second, or 700 lbs. seven inches high per second, which is nearly three times as great as the amount effected by two horses attached to a plow. That is, five-sixths of the force applied in plowing is expended in overcoming friction and cohesion. Here is a chance for inventors to exercise their ingenuity for a long time to come, in endeavoring to lessen this loss of 500 per cent.

A two-horse team, as we have just remarked, should do nearly ten times as much work as a single hand. This remark applies to cases where the full strength of the man is exerted to the best advantage. But the gain by machinery is much greater, if well perfected, in doing what men perform to a decided disadvantage, or where their strength can be only partially applied. Such for example, is the case with some of the best seed planting machines, as compared to planting by hand; or of some of the most perfect horse hoes or cultivators, as compared to the slow and tedious process of hand weeding,—in neither of which instances is one half of the human strength advantageously applied. It is here that inventors are to look for extraordinary results. The manufacture of cotton furnishes an interesting illustration,—where the best modern machinery turns out in each day at least two hundred times as much goods as the tedious process of hands and fingers accomplished eighty years ago.

Our limits will not allow us to enter into the details of this subject, which would furnish ample materials for a volume. We only wish to *call* the attention of farmers, whose business it is to judge of farm machinery, and furnish suggestions to manufacturers, to the importance of thoroughly understanding the subject. It is interesting to look back and see what has already been done. The capital now constantly invested in farm-labor and farm-forces in the United States is not less than 500 millions of dollars per annum, although but one half of what it would have been, but for the improvements in the plow, the thrasher, the fanning-mill, the seed-sower, the horse-rake, and the reaper. What may yet be done towards reducing this enormous amount, must depend on the ingenuity of our inventors, and on the general knowledge and sagacity of our farmers.

◆

FRAUD IN GUANO.—Every thing which brings a high price, invites fraud, and impositions in the form of spurious merino sheep, artificial fertilizers, &c., are natural results where men do not know the "beginning of wisdom," or that honesty is best policy. Prof. Norton says "the most barefaced impositions are practiced in England, certain parties having sold a species of loam resembling Peruvian guano, at a high price, the bags having been dusted, both inside and out, with some of the real article to counterfeit the true smell"—thus selling character and conscience for life to get a few weeks dishonest gain,—a hard bargain.

Hay and Fodder---Cutting and Curing.

It may be safely averred that there is not a single operation on a farm that cannot be, and that ought not to be conducted upon scientific principles. Hence the utility, the necessity, of a scientific education of farmers. If the remark be true of farm operations generally, it is more especially so of the subject of hay-making. In this we require a knowledge of vegetable physiology, of chemistry, of *pharmacy*. Vegetable physiology will teach us the nature and functions of the various organs and parts and juices ot the plants with which we have to do; chemistry will teach us the theory, and pharmacy the art, of curing and saving the article in the best manner. There is no doubt that a very large portion of the nutritive matter of hay, and all kinds of fodder, is lost by a want of knowledge of this kind. The writer of this has never seen a hay-field at *haying time*, that he was not forcibly impressed with this truth. To illustrate this subject—suppose a pharmaceutist, the Shakers, for example, were to gather their medical herbs, and cure them, and house them in the same way that hay and fodder are usually gathered, cured, and saved—what, let us ask, would they be worth? Gathered at very improper seasons, cured in such a manner as to ferment and evaporate all their intrinsic virtues, and at last housed in a place, and in a condition, to make assurance of its destruction "doubly sure," it may well be conceived they would not be worth much. There are certain rules to be observed in this, as in all things, to attain the highest degree of perfection. Every kind of hay and fodder will be good or good for nothing, according to the degree of attention to these rules. The grass should be allowed to attain the highest degree of perfection before it is cut, and that degree is found to be at the time of *flowering* or blooming, just before the seed begins to form. It being a *herbaceous* plant, the whole natural object of it is to make seed, and all its juices are, at the time of flowering, in their richest state. This is the time to cut it. If cut before this time, the juices are imperfect, and the fibrous matter immature; and if delayed beyond this time, more or less of the richness of these juices is expended in making the seed. If the seed is allowed to become *ripe*, the hay is comparatively worthless. We never saw a load of hay in the market for sale, that did not exhibit unequivocal signs of having had a very large portion of its rich qualities exhausted, either before it was cut, or in curing. When it is understood, that if allowed to ripen seed perfectly, the grass loses all its rich juices, and becomes mere dry straw—woody fibre, a little silicate of potash, and a very trifling quantity of vegetable extractive matter, the importance of cutting it at the right time will be apparent.

And here it is proper to mention another error of almost, if not quite equal importance. It is that of mixing different kinds of grass together. There are scarcely any two grasses that flower at the same time, exactly, and if two be mixed that flower at different times, one or the other will be greatly deteriorated by being cut too soon or too late. All grasses should, therefore, be kept in distinct meadows.

The curing process is, however, of much the most importance. No matter at what times the grass be cut, if it be not properly cured, the hay will be worth less, in proportion to this imperfection. Two tons of hay shall be taken from the same field, the one cured properly, the other carelessly—and the one shall be worth twenty dollars, while the other will be dear at any price, except for mere straw. Let us descend to particulars, for the subject is sufficiently important to authorise it. Nearly the whole nutritious properties of the hay are in a fluid, or semi-fluid state, highly susceptible of fermentation; and if fermentation takes place, they will be immediately dissipated in vapor. The object to be attained is to cure the hay, by evaporating the *water* only, of these juices, leaving the saccharine and other principles in a solid state in the body of the grass. But if the juices of the grass be allowed to ferment, then all these principles are rapidly changed, and pass off with the water in vapor. The usual method of curing hay, especially in the middle states, permits the green cut hay to lay in masses till it gets more or less heated, especially the under portion of it. This heat is produced by fermentation. We usually see the hay in the swath till the next day, and then it is merely turned over, and even that very *carefully*. The underside will then be found to be very warm. Now, all this is wrong. The hay should be shaken up lightly, and loosely, so that none of it will lay in compact masses, and that the air may pass freely through it. It should be gathered into winrows as late as possible in the evening, and these should be well opened and turned, and loosened, early in the morning, so as to avoid spontaneous fermentation. If the weather be fair, the hay cut yesterday will be fit for cocking this afternoon, but it is not ready for housing or stacking. A great error is often committed in cocking hay, in allowing it to remain in these small stacks too long. When cocked, the hay is merely wilted, not cured, and if allowed to remain in cocks, will ferment there. They should be opened and spread about, and re-cocked several times before being permanently stacked or housed. Shaking hay about has a great effect in curing it, much more than is generally supposed. It exposes it to fresh air, which carries off the water, and the oftener it is shaken up, the sooner and better it will be cured. Many object to shaking up the hay while the dew is on it in the morning. This is an error. A good shaking at that time, will effectually dry it.

Many an old farmer will undoubtedly laugh at my simplicity, in thinking it necessary to give such plain, common-place notions, publicity. But if they will take a look at the hay that is daily brought to all our markets for sale, they will find abundant excuse for me. Nine-tenths of the hay thus exposed for sale, is a mere mass of dry straw; much of it made so by curing, and the rest by unseasonable cutting. Hay, in a perfect state, should be of a bright greenish color, and as odoriferous as green tea; but the mass of that brought to our markets, is of such a dull straw color, that it requires some close inspection to ascertain whether it be hay or mere *chess* straw, and you may run your nose into the middle of a load of it, (if it be long enough!) without detecting any odor at all—unless it be a musty one.

I must give the New-York farmers the credit of producing the best hay we have seen in our city markets. I have frequently used that sent by them to the Baltimore market, pressed in bales, and found it to be worth, intrinsically, twenty-five to thirty per cent more than that usually brought here from the surrounding country. And the reason of this difference in quality evidently grew out of the more perfect manner of curing, and attention to the time of cutting. There are many individual exceptions here. There is as good hay made here, as there is in the north, and as good farmers, and as scientific farmers too, but they are exceptions to the rule, not the rule itself. My object, of course, is to do my part to make all our farmers what the exceptions are admitted to be. G. B. S.

Premiums for Reapers and Hay Presses.

The following resolutions were adopted at a recent meeting of the *Maryland State Agricultural Society*, and are worthy the attention of patentees of Reaping Machines, and Hay and Tobacco Presses. The competition for the premiums, is open to the whole country, and a jury of twelve persons has been appointed to award the prizes, after a careful and thorough trial of the machines.

Col. J. C. Walsh, of Harford, called the attention of the society to the importance of a change in the present mode of awarding premiums for certain objects which he specified, and to correct which, he offered the following preamble and resolutions:

Whereas, It being a matter of considerable importance to the agricultural community of our state, that all farming implements, especially those involving a considerable expense in their purchase, and which, if properly constructed, would be profitably and extexsively used, should be properly tested, and their merits and demerits made known by a fair and impartial examination and trial, it is therefore

Resolved, That a committee of twelve members be appointed by the chair, whose duty it shall be, at some convenient period during the ensuing harvest, to examine any reaping or mowing machines that may be presented to their notice, and to report to this society, at its annual meeting in October, an opinion of their respective merits, based upon their actual performance in the field. It shall be the duty of said committee to give notice in the public prints, of the time and place selected for the trial. It is further resolved, that to the exhibitor of the machine possessing the most valuable properties, as decided by the committee, a premium of $100 shall be awarded by the society.

Resolved, That a committee of twelve members be appointed by the chair, who shall, at as early a day as practicable, invite the proprietors of the several hay or straw presses now in use, or any others which may be exhibited, to an actual test of their qualities in presence of said committee; and to the exhibitor of the press decided by it as most deserving, a premium of $50 dollars shall be awarded by the society.

Col. Bowie then moved that a premium of $50 be offered for the best tobacco press, and that a committee of twelve be likewise appointed to make a practical test of the capacity of the machines which may be offered to their inspection, at such time as the committee may select—which motion was adopted.

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Economy of Farm-power.—B. P. Johnson, in his letters from England, in speaking of the skilful farm arrangements of J. J. Mechi, the celebrated English agriculturist, says that by means of an engine of six-horse power, he drives a pair of mill stones for grinding feed, threshes and dresses grain, pumps water, cuts chaff, turns the grind-stone, raises the sacks of grain, and the waste steam cooks the food for cattle and swine—the work being all performed in a first rate manner.

Pruning and Grafting Shears.

Good treatment of fruit trees is always promoted by convenient tools; and the excuses for negligence are lessened with every facility for their proper management. For many of the operations of pruning, shortening-in peaches, &c., where branches not over an inch in diameter are to be cut off, the hand-shears will be found exceedingly convenient, and do the work with thrice the rapidity of the knife.

These are usually made as shown in the annexed figure, (Fig. 1,) and their great power depends upon the "draw-cut," or sawing motion imparted to the blade by their peculiar construction. The principal cutting blade has a movable center, so that when the handles are pressed together, the connecting bar *a* draws this blade downwards, giving it a compound motion, and increasing its power many fold over the simple cutting movement of a pair of scissors. The spring *b* serves to throw the shears open when not under the pressure of the hand.

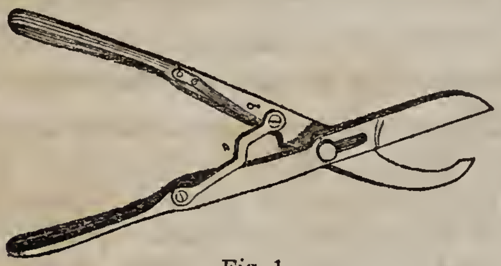

Fig. 1.

This instrument has been known among gardeners for many years. A much simpler mode of obtaining the full power of this *draw-cut*, more especially as applied to cutting off and slitting stocks for grafting, was described some years since in the "Fruit Culturist."* It may however, be applied with equal advantage to any kind of shears for pruning. The annexed figure, (Fig 2,) represents this instrument as used for grafting. The thin blade A, two or three inches long, is set at an angle with the handle B, of about a hundred and twenty degrees; and for this very reason, when the shears are closing, the blade makes a draw-cut towards the concave bed C, which is placed against the stock to be cut. A tree an inch in diameter is chipped square off by this tool, with as much ease as a jack-knife will clip a carrot. This grafting instrument may be at once transformed into shears for pruning, by substituting for the bed-piece C, another and blunter blade, Fig. 3.

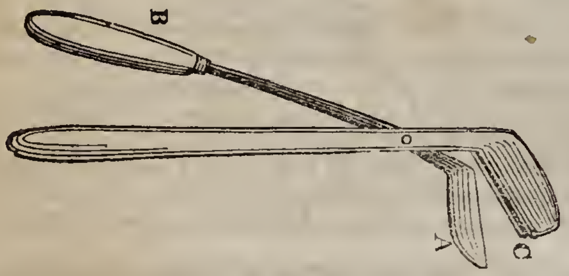

Fig. 2.

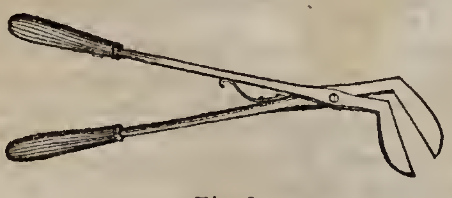

Fig. 3.

In order to make the principle of the working part of this instrument more clearly understood, we annex two simple figures, (Fig. 4,) the one representing the objectionable mode, sometimes adopted, of placing the pivot at the angle in the blade, the dotted lines (which are nothing more than circles described around the pivot *a* as a center,) clearly showing that this blade cuts only at right angles, and consequently does not possess the power of the other blade, where the pivot being placed below the angle, the cut is made obliquely,—it has the *draw-cut*.

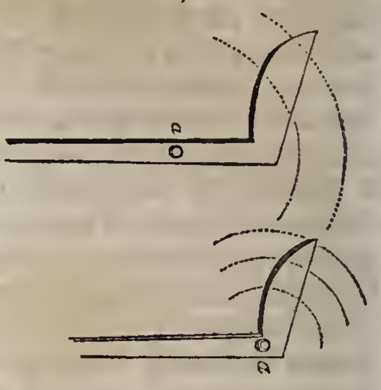

Fig. 4.

We have been surprised that so few persons have ever used this improved form, and that its merits appear to be so little known, although several years have elapsed since it was made public. Not only in journals of the day, but in elaborately written books, the old construction alone is given. Within a few years, an ingenious but complex "stock-splitter" was figured and described in the Horticulturist, by A. FOOTE, of Williamstown, Mass., and has been much commended; but although great force is given to the blade by the handle and small wheel, yet it lacks the *draw-cut*, and the power, possessed by the instrument already described. Our object in thus alluding to this subject is not only to call the attention of cultivators, but to induce some of our excellent American cutlers to improve the instruments they are now manufacturing.

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* This instrument was invented and successfully used, by the late ABEL THOMAS, of Aurora, Cayuga co., N. Y., and has since been proved of great value by those who have adopted its use; the writer of this notice after fifteen years trial can speak confidently of its merits.

Guano and Lime.

Wm. Boulware of Va., has furnished the American Farmer the statement of an interesting experiment, showing that guano is not so evanescent in soils as it has generally been believed to be. Three years ago, 50 bushels of lime per acre was applied to a field of corn in spring. The next autumn, two acres of this field were dressed with 200 lbs. of Patagonian Guano, and the whole field sown with wheat. A part was sown with clover the next spring. The wheat looked much the best on the guanoed part during spring, but lost much of its superiority in the drouth of summer, the soil being light. But the clover took well, and the next year yielded a luxuriant crop after the guano, but on other parts of the field was not worth cutting. After the second crop of clover, wheat was again sown, and on the two guanoed acres it was one hundred per cent better than on that which was limed only, and otherwise of equal fertility.

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REDUCING BONES FOR MANURE.—The American Farmer gives the following method of reducing crushed bones without sulphuric acid. Mix two bushels of ashes and one of salt, with each bushel of crushed bones; moisten the bones first, and leave the whole in pie four or five weeks before using the mixture, shovelling it over two or three times during that period."

On Raising Horses.---No. 2.

I closed my last communication with a promise that this one should relate more particularly to breeding. This is a subject of great interest and importance—one involving many intricate and curious phenomena, and one which may be both studied and practiced with profit, by every intelligent farmer in the world. But to study it with profit, requires constant and long continued observation of those subtle phenomena, which often involve such apparent contradictions, as to lead the impatient superficial observer to regard the whole matter as either a hidden mystery of science, or a blind subject of chance. To practice it with profit, requires that confidence in its issues, that determination to succeed, which will insure a proper prepation for it, and a deliberate purpose to make it a business—not a sole business, but one that will be strictly attended to—and pursued with diligence and forethought, with a view not only of advancing science, but of increasing wealth.

And I may here remark, that any person who expects to reap the profits from this department of husbandry, of which he so often hears and reads, without pursuing it in such a spirit, and with such a purpose, will meet with decisive disappointment.

The great error has been, that farmers have always regarded the raising of colts a collateral and minor branch of business—much on a footing with chicken-hatching and bee-swarming—to receive the attention of boys only, during odd hours, and to cost but little, first or last. The mare must be a cheap or unsaleable one—perhaps crippled. She must go to some neighbor's two-years-old, gratis, and do as much work during the year, as the gelding at her side. If the colt is born alive, it must follow the dam at her daily toil, and live on what it can get until winter, when it is turned into the yard with the cows, and bull, and oxen, to eat straw and stalks until spring; and if one or other of its companions above named, does not suddenly end its life long before that time, when it is four or five years old, its owner may perhaps get for it, sixty-five or seventy dollars—i. e., an old buggy waggon, a yearling bull, and silver watch.

Now, certainly, it is no marvel that such persons should testify so positively against the profits of *breeding* horses. *They*, of couse, can buy, not only cheaper, but better, than they can raise them. But to those who regard it more intelligently, as a branch of business requiring the same relative care and capital that is required for the successful raising of crops, or the making of cheese or butter, it will always prove to be an employment as profitable as it is pleasant and instructive.

But I am forgetting our excellent author. Of the selection of mares, he says:

> The most practicable, and generally the most profitable and satisfactory course to be adopted, for the establishment of a stud of brood mares, is that of purchasing good shaped animals, combining the most fashionable blood that can be obtained, and which have been already tried in the stud, as well as on the turf, or the road. Those only, should be admitted, possessing the recommendation of sound constitutions, and freedom from hereditary defects or blemishes, with good legs and feet—uniting the sources of those perfections, with the symmetrical proportions of the body, on which is dependent the position of the legs, and to a great degree, their quality.

"Like begets like," is a maxim which, although not infallible, ought not to be forgotten. It is more frequently applicable to defects than perfections. As it is more frequently the case that hereditary imperfections, and constitutional defects, are entailed on the offspring, than otherwise, too much circumspection cannot be observed in these particulars.

What defects are constitutional, or hereditary, and what are not, our author intimates, can only be determined by circumstances. As for instance, blindness, or roaring or spavin, or curbs, may be owing to accident, violence, cataract, malformation of joints, &c. &c. In the former cases they would not probably prove hereditary—in the latter they sooner or later would.

As to the age at which mares should be put to breeding, our author says:

> It has often proved the case, both with mares and stallions, that their best foals have not come forth till they became advanced in years: this however, more generally applies to stallions than mares. I am quite unable to state the cause, or even to assume the reason, neither have I ever met with any person who could do so satisfactorily.

But we are not to infer from this remark, that we are advised to select aged mares as breeders, for a little further on we are told that,

> To commence breeding with an old worn out creature, sixteen or seventeen years old, cannot be sanctioned, the object being profit, by breeding fine, vigorous and powerful animals. To obtain a good sort of mare, it is far better to give a good price for one at six or seven years old, than to attempt the speculation with one whose infirmities render it very problematical, whether her produce will be worth rearing. Many breeders, on the other hand, appear to covet very young mares, but from the observations which I have made, I have no reason to recommend them. Mares will continue to breed till five and twenty, sometimes till they are nearly or quite thirty years old; but as they approximate to that age, their produce is generally smaller than during the more vigorous term of their lives.

I will close this article with one other extract, which I think suggestive and pertinent:

> It is a matter of opinion whether the offspring partakes most of the faculties of the sire or dam. They no doubt participate in both, though from which they shall derive the greater amount of perfections it is difficult to determine.
>
> In some instances it may be observed that all the produce of certain mares partake of her peculiarities, while, on the other hand, some mares will throw foals whose characteristics follow their sire; and, on some occasions peculiarities are traceable to grand-sires, grandams, or even more remote kindred. These are subjects which demand attention. The breeder who devotes most skill in the selection of suitable animals to breed from, will assuredly be more successful than one who leaves all to chance.

And now, reader, you perhaps have had patience to read the whole of this article. What dees it amount to? What does it teach?

Does it, in the first place, claim for the subject, the dignity of a study, and a business? Does it insist that those who pursue it shall employ capital, fore-thought, patient observation and an indomitable determination to succeed? Does it awaken in you any new energy? Does it convey any new truth, or remove any old error? Does it even set you a thinking? If so, I am your obliged and humble servant, B. *Syracuse, March* 5, 1852.

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The mind is never right but when it is at peace within itself, and independent of everything abroad.

Experiments in Growing Indian Corn.

Eds. Cultivator—Agreeably to promise, I enclose another experiment on "Indian Corn," that, in itself, would seem of little importance; nor should we attach too much importance to experiments of this kind, until they shall have, by oft repeated trial, placed the question beyond a doubt. Who knows which will produce the greatest yield to the acre—grain from the *large end*, from the *middle*, or from the *small end* of an ear of corn? Who knows but what we, by shelling off the grains from the large end, and the small end, for the pigs, and planting the middle, are not doing just the reverse of what we should do? I venture to predict that very few, if any, *know* anything about it. We judge—we guess—but what does judging and guessing amount to? We do not guess at the amount of interest we are to receive or pay. No, we prove by *facts* and figures, the exact amount. Now if we can arrive at a few facts in seed planting, we may derive as great great advantage from it, as in accurate reckoning of interest.

In the following experiments, I do not claim to have established any "facts," but rather to have seen the "finger board" that points the way to the field of experiment, wherein there are many truths concealed, which we have only diligently to seek, in order to find; and to have started in pursuit of a few, with a full determination to some definite result.

On the 14th of May, 1849, I selected an ear from my seed corn, (of the eight rowed, yellow variety,) well capped over the end with sound grains. I shelled and planted three hills, of five grains each, from the large end,—three from middle, and three from the small end. Soil similar, and treatment alike in every respect. Top stalks cut 20th September. Corn husked 28th October, and weighed as follows:

	lbs.	oz.
3 hills, seed from large end,....................	2	00
3 " " middle,..........................	1	12
3 " " small end,......................	2	4

My whole field was injured some by worms at the roots, this included. The produce is not a pound to the hill, which must be regarded as a light yield. It will be seen that the small end takes the lead—half a pound over one, and a quarter of a pound over the other. This resulting so different from what was expected, led me to institute the following:

On the 18th May, 1850, I planted 30 hills from one ear, 10 from each end, and 10 from the middle—five grains to each hill, of uniform depth and soil. Treatment alike in all respects—grew unmolested, and produced a fair yield. Top stalks cut 12th Sept. Corn husked 9th October, and carefully weighed. Stalks also weighed—resulting as follows:

	Stalks.		*Corn.*		*Total.*	
10 hills, grains from large end,	14 lbs.	4 oz.	12 lbs.	8 oz.	26 lbs.	12 oz.
10 " " middle,..	14	14	12		26	14
10 " " small end	18		13	8	31	8

Allowing 4,000 hills to the acre, and assuming this experiment as a guide, the difference in favor of planting seed from the small end, would be 10 bushels, 40 lbs. to the acre, compared to that from the middle, and 7 bushels 8 lbs., when compared with the seed from the large end. The large end takes the preference over the middle, by 5 bushels, 20 lbs. to the acre. The grain from the small end produces more stalks than the middle, by 1,256 lbs. per acre, and 1,500 lbs. more than the large end. Now, *why* this should result so, is more than I am able to explain. *That* it is so, I have proof positive.

On the 24th May, 1851, I selected an ear from my white corn, *not fully* capped over the end, and planted 30 hills, as in the above; and though my man exceeded orders, and cut it in my absence, yet I had observed, during its growth, that while that from the large end and middle were very nearly alike, the corn from the small end was not near as good. Hence, I *conclude*, if these experiments will admit of anything like a conclusion, that where the cob projects beyond the grain, the lower grains being imperfect, should be rejected; but where the ear is well filled out over the end, these grains should be first chosen for seed.

A neighbor, on whose statement I can rely, says he once planted, through the carelessness of his men, about 20 rows of corn from the small end of his seed ears, which had been carefully shelled off, and put aside as unfit to plant; but greatly to his surprise, on harvesting the crop, it was impossible to discover any difference. Geo. W. Coffin. *Amenia, Dutchess Co., March*, 1852.

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Treatment of Strawberries just before Fruiting.

We have repeatedly urged the importance and shown the advantages of irrigation; but where this cannot be adopted in practice, mulching is a good substitute. The following mode of treatment is described by J. Cuthill in Hovey's Magazine, as practiced by Joseph Myatt, the celebrated strawberry raiser, and by himself. "Having no water near him, Mr. Myatt depends entirely upon the immense quantity and the quality of his manure for keeping the ground moist, together with a good coat of straw; but where manure is scarce, perhaps my plan, which I have practiced for many years, would be the best. I always mulch between the rows with fresh straw, mixed with horse droppings, laying it on at least an inch in thickness, just when the plants are coming into flower; and if the weather is dry, I water frequently, but not over the flowers, until all the fruit is set. By the time the latter is ripe, the strength of the manure is washed down among the roots when they most want it, leaving the straw clean and sweet."

Spent tan has been extensively recommended and considerably used for mulching strawberries. But N. Lonworth of Cincinnati, who never adopts anything hastily, says, "Tan I have discarded. It soon rots and renders the fruit dirty. In its green state it injures the flavor of the fruit. I prefer the old covering, from which the plant takes its name, cut straw."

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Beet Sugar in France.—The *Plough, Loom and Anvil* informs us that an acre, well cultivated, will produce in the West Indies, thirty tons of *plant* cane, or 6,000 weight of sugar, while an acre of beet will yield only 18 tons, producing 2,100 weight; yet notwithstanding this, the importations of sugar from French colonies into France is rapidly diminishing, and the manufacture of beet sugar constantly increasing, the duty being the same on both. This result is ascribed to the superior advantages of *proximity to market*. The annual duties on French beet sugar are now 30 million francs.

The Potato---Its Culture and Diseases.

Messrs. Editors—I am well aware that the "potato rot" has become a hackneyed and exhausted subject. I have no intention of undertaking to say what causes the rot, or what will cure it, but simply to give the result of my experience the past season, and perhaps add a few remarks on the crops of others, which have fallen under my observation, and let others draw their inferences.

First, then, we say, that last spring we had but very little confidence in planting any potatoes at all, in expectation of a crop. We, however, plowed a small piece of sward land in April, and immediately planted it with early potatoes. This was a warm, dry loam, resting on limestone. No manure was applied, and no rot affected the crop. Yield very good.

Second. A few days later we plowed another small piece where potatoes were raised the year previous. Soil, sub-strata, and management, the same. A very few rotten ones were found here.

The third parcel were planted around a corn-field, which was in clover the previous year. Soil, dry loam, lying on hard pan. Plowed late in April, and planted the middle of May. No manure applied. The variety planted here were peach blows, which were dug in October. On the headlands, where the teams turned in plowing, and of course trod the ground into greater compactness than in other parts of the field, a portion of rotten potatoes were found; in other parts none.

Our fourth experiment was on a piece of old meadow. Soil, a loam, inclining to clay, resting on, and very near limestone. Land plowed, harrowed, and planted, early in June. Potatoes hoed once. Crop dug 15th of October, and none rotten. No manure was applied to this piece.

Our next, and last experiment, was on a piece of black loam, in a low meadow. Subsoil, clay. Land plowed, harrowed, and planted without manure in June. The crop, which was good, was harvested near the close of September. No rot. The dry weather probably contributed much to the benefit of this last crop, for had the summer been rainy, the ground would have been miry to the subsoil, while, as the season was, it was light and friable from the 20th of July.

Thus much for our own experience with the potato crop the last season—and from it we derive the fact that early or late planting is not productive of the rot, nor remedial of its consequences. We also find that light, porous soils are the best, as in such soils no rottenness was found—while in the same soil, rendered compact by the trampling of animals, the plague commenced. Hence, we venture to inquire, if thorough and frequent sub-soiling, after underdraining, which latter will have a tendency to equalize the moisture, may not be beneficial or effectual, in stopping the disease.

The influence of manures in this matter, is worthy of consideration. A neighbor, who planted early, to enable his crop to escape the rot, on a dry, limestone soil, manuring in the hill with common yard manure, found the disease at work the latter part of August, and early in September he dug all, with a loss of a large proportion. Many similar results were seen, which leads to the conclusion, that the use of such manures in potato culture, must be abandoned. Yet we are confident, that loose, unfermenting manures, such as straw, swingle tow, and indeed litter of almost any kind, may be applied with good effect. Yours truly, W. Bacon. *Elmwood, Jan.*, 1852.

Messrs. Editors—I too should like to say a very few words on the potato disease. This subject has engrossed the public mind for many a year, and the truth of the cause of the disease in question, is now as far from being settled, according to my humble opinion, as it was on the first day of its appearance.

A writer in the N. E. Farmer of September 13, 1851, says, "The cure of the rot, if ever found, will most likely be the result of scientific investigation and experiment. Harvey discovered the circulation of the blood, and Sir Humphrey Davy invented the safety lamp; and if the cause and cure of the potato rot are ever ascertained by the living men of New England, we venture to predict it will be by such men as Dr. C. T. Jackson, Dr. Harris and Mr. Teschmaker."

This prediction may prove true, and thanks to a higher power, it may not prove true. "The race is not to the swift, nor the battle to the strong—but time and chance happeneth to them all."

I have watched the progress of the potato disease for ten years, and I have read the writings, I should think, of some hundreds—and what is very remarkable, no two of that number have agreed on the cause or cure of this formidable disease. And I am pleased to know, and say, that the subject is still open for discussion. And I am not one that thinks no great truth can be discovered, except by the master minds of the age—far be it from me to subscribe to such a doctrine—truth is mighty, and it is said, quaintly, that her seat was in the bottom of the well—then why may not some honest Jonathan, with his bucket or grappling-iron, draw her up.

The potato in South America, where it is indigenous, is never diseased. Now if this be a fact, what is the inference? That the potato in North America is an exotic, and needs special care and protection to bring it to maturity. Has it had a common care, or the least protection against a worse enemy than man, that of early frosts on the vines? The farmer has not been particular in planting early, in selecting the best seed, nor in his choice of the best varieties for his use—but has thought the potato, like the sunshine and rain, was such a common blessing, that he considered it no blessing at all—until he was fearful he should lose it.

It is hardly worth while to say that in the potato family, there are a great many varieties—some coming to maturity in four months, some in five, and some again would require six months and perhaps a longer time. The Long Red or the La Platte potato, which has not been in this country fifty years, has never yet found a season long enough in New England to mature the tubers, although they have grown to a great size, and for many years were the farmer's hope for fattening cattle and swine. What farmer boy is there, that cannot well remember the effect of the first hard frost in September, on the Red potato vine—on the certain death of the vines, from top to bottom—and all the *black*, *green*, and *blue bugs* between this and Nova Scotia, could not have done the work so effectually, in a month, as Jack Frost had done at one visitation. Now just remember that this casualty has been an annual visitation—there has been no exception to the rule—the Long Red potato has never ripened its fruit—and yet these potatoes have been taken and planted for seed, again and again, without any material sign of decay until within about ten years—since that time they have been sadly diseased. The only wonder is, that they have shown such tenacity of endurance, and that they did not flare up ten years before. I suppose all will agree with me in this one item, that when the vines are killed, the potato ceases to grow. Then, for the sake of the argument, I admit, that the Long Red potato has never had a season more than half or two thirds the length that it required to bring to full perfection the tubers—and what must be the result of this long course of planting half grown and half ripe potatoes, but an entire failure sooner or later. Does it need a "ghost from the vasty deep to tell us of this self-evident fact"—that "like begets like?" This when reduced to plain English, means, that if you plant imperfect seed, you will get imperfect fruit.

There are a few varieties, such as the old English White, a small black potato, and perhaps some others, appear to ripen their tubers before the early frosts appear—these perhaps have become acclimated, therefore, have not had this *frosty ordeal* to go through that most of the others have had.

The next question that suggests itself—what is the remedy? And is there any? Yes, there is a remedy—we must go back to first principles. Begin *de novo*, must be the only certain remedy. Import from South America, such varieties, and such only as require a short season there, and plant them early in this country, and if the season proves long enough to ripen the tubers there will be no fear of rot.

Those varieties that as yet appear to do well with us, should be retained,—selected with more care for planting, and above all, to be planted very early.

The Chenango has been considered a very early variety—but now it is a very rotten one—it has had its frosty time in Maine too long, to depend on it for future use. I have no doubt that if the Long Red or the Chenango were carried to South America, and there planted, they would show their old tricks—for their vitality is impaired. What may be said of the Long Red, may also be said of all other varieties, in a greater or less degree—the above variety being the best marked in its sojourn among us, I chose it for the purpose of demonstration.

Now if any one will prove to me, that the potato in its native country, is alike diseased as in this, then my theory goes for naught—and "I take the odd hits." ALF. BAYLIES. *Taunton, Mass., Jan.* 31, 1852.

MESSRS. EDITORS—We have read a good deal about the potato rot, for the last few years. We are as much in the dark as ever, as to the *cause*, and as *theories* are getting to be something of a bore, I will merely give my plan of raising *sound* potatoes.

I select a loamy soil—think a sward best—plow eight inches, (subsoiling is favorable of course.) I use the variety called the *Early Shaw* potato; plant in April; from ten to fifteen bushels to the acre. The Early Shaw is only tolerable as a table potato, but is the only variety with us, which escapes. No manure, (yard manure,) should be used, as it gives a tendency to rot. Hoe well, twice—hilling lightly once. To sum up—plant on good quick soil, an early sort of potatoes, early in the season. P. *Sennett, Cayuga Co., N. Y.*

EDS. CULTIVATOR—I wish to bring to your and your correspondent's notice, a new disease, (or it is so with us,) differing from either the dry or soft rot. I first saw it three or four years ago, and from that time it has gone on increasing, and last fall whole fields were affected by it, and almost every tuber.

The first appearance of the disease is roughness of the skin in spots, and slightly raised, looking very much like a wart, but seemingly as fresh as any other part. This takes place about the last of July, and these warty excrescences gradually enlarge upwards, sideways, and into the potato, after a while assuming a reddish appearance within and then a black. At the latter stage, small worms, similar to the radish worm, are sometimes found within the decayed part, and to it some have ascribed the disease, but I think wrongly, as I have failed to detect any but full grown ones, and in a large majority of tubers, there was no worms at all, at any stage of decay.

Perhaps some may say it is nothing but the dry rot; true, it is a dry rot, but nothing like what is understood as the dry rot in potatoes. Some will have only one spot on them, some a dozen, and some mostly covered over, and the rest of the potato, without and within, perfectly sound. As far as my knowledge extends, this disease is confined to turf soils, and is worst on the driest ground. The disease is a great drawback on the the value of the potato, and renders many of them totally unfit for market. I hope these few lines, hastily thrown out, may call the attention of your readers to the subject, and be the means of throwing some light on this new and formidable enemy of the potato crop. A SUBSCRIBER. *Chester, Orange co., N. Y.*

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A MODEL FARMER.—A correspondent of the Ohio Cultivator, says, "While at the east a year ago, I met a farmer residing near Auburn, N. Y. His farm, containing 40 acres, was cultivated in a high degree; his house was in excellent architectural taste, his yard and garden planted in good order and dressed with care, his out-houses neat, his fences new and painted, and all things in admirable style, simple, yet neat and truly tasteful. I was much surprised when he informed me that he and his family performed all the work—that he did not work hard—and saved something every year.

Transplanting Trees for Fences recommended.

EDS. CULTIVATOR—The old white oaks are dying in many places in Western New-York. Very few live longer than two hundred years, and a large portion not more than one hundred and fifty. In this vicinity the wood of the trunk and limbs is often perforated by the larvæ of a small insect, which soon kills the branches, and in three or four years the tree dies. Many farms are already deficient in timber for rails, and their owners will be obliged to adopt some other method for fencing their premises. I think transplanting trees at a suitable distance for fence posts, would be a cheap way of obtaining a durable fence. Were it done along our road sides, the shade of the trees would be refreshing to travellers; it would render the appearance of the country more beautiful, and their trunks would be permanent posts, to which wires or rails might be attached.

Several years since I saw the Sycamore, or Button Wood, (Platanus occidentalis,) in use for fence posts on the east end of Long-Island. They were planted at intervals of about twelve feet, and rails mortised into their bodies. The growth of the tree soon embraced the ends of the rails, and all that was necessary to keep the fence good, was occasionally to have a new rail, when an old one became rotten. A better plan would probably be to have strong wires inserted through the bodies of the trees.

In low moist grounds, the large yellow Willow, (Salix vitellina, Lin.) would be suitable. It grows rapidly, and there would be little trouble in transplanting it; the mere insertion of the limbs in the spring being sufficient, which can be done very rapidly by the aid of a crow-bar. A neighbor has trees of this willow better than two feet in diameter, from branches stuck in the earth little more than twenty years ago. S. B. BUCKLEY. *West Dresden, Yates Co., N. Y., Feb.,* 13, 1852.

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Extirpating Sweet Flag.

Observing an inquiry in your September or October number, of the best way to get rid of sweet flag, I will state a successful attempt of my own. Some ten years ago, I bought a piece of ground containing four considerable patches, which I resolved should be destroyed. Some of it had not been set more than 8 or 10 years, and although mowed every year, it was covering a quarter of an acre, and was likely to spoil the meadow. To remove it, I took my team and hired man after haying, and with two sharply ground shovels we commenced operations. I found the main root to run horizontally, very near the surface, and from these, thousands of small ones extended downwards. We first cut the surface into square chunks, and then running our sharp tools under the large roots, and cutting off the numerous small ones, we removed them and carted them into the barn-yard, where, after remaining a year, they were worked into good manure. My man told me the small roots would spring up and form a solid mat of flag; but nothing of the kind has since made its appearance in the meadow, which is now growing red-top grass. E. VAIL.

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THE VALUE OF BONES.—The American Farmer says that every 40 bushels of bones dissolved in sulphuric acid, (about ½ of the latter,) is equal to 200 lbs. of guano.

Surfeit of Fruit Trees.

The best growth, and the finest fruit, are always to be expected when the tree is furnished with the materials of nutriment in just the right proportion. If greatly deficient in any essential ingredient, the tree languishes from starvation. If any highly nutritive substance is in a large overdose, the tree may be surfeited or poisoned. We have seen a fine cherry tree as completely killed by embanking it heavily with hog manure, as any animal with a dose of arsenic. But in the eastern and middle states, this is a rare evil. It sometimes happens, indeed, that pear trees are rendered more liable to blight, and peaches to frost, by high manuring in low rich valleys. The great difficulty, however, throughout this region, is *the starvation* of fruit trees. There is not one case in a hundred, where better fruit, and more of it, would not be obtained by a deeper and a richer soil for the roots to run and feed in; or by the removal, by means of clean culture, of all weeds, grass, or other vegetable growth, which may rob the tree of its full share of the riches of the soil.

In large portions of the great fertile "West," the case is quite different. The long and hot summers, in connexion with the severe frosts of the winters, render more caution necessary in the application of manure, the natural richness being often enough, without any manure. As applying to such localities, the following remarks, with which we have been favored by a correspondent at Jefferson Valley, N. Y., will doubtless prove interesting.

"A surfeit of trees manifests itself by the appearance of the leaves on the growing twigs. Instead of shooting out rank and large, they are thrown out in whorl-like clusters. The twigs which support them grow a few inches, and then often commence dying at their extremities, having a black tip. If these twigs do not die in their whole growth, the leaves finally fall off, leaving a small stinted years growth, with its buds crowded all along its length, frequently not the sixteenth of an inch apart.

"Thus, by over feeding, one years growth is worse than lost, for several years will be required to establish a healthy action again. This disease frequently shows itself on grafts set in a large thrifty stock, when the top is all cut off at once, especially if the tree stands in a rich soil, and the season is a wet one, so as to dissolve a great amount of food.

"If any one doubts the correctness of this view, he can satisfy himself by a few weeks experiment in the month of June. A tree may be planted in front of a barn-yard, in any rich spot where it will receive the washings of manure. Every twig on it will soon take on a whorled appearance. Let the earth then be all removed from the roots, and its place supplied with yellow loam, and in a few weeks more the twigs will shoot off, and take a more healthy appearance. I have tried the experiment on young pear trees, with unvarying results.

"Another effect of surfeiting, is the splitting of the trunk, from root to branch. I lost dozens of the choicest varieties of cherry trees, from this cause, in early life. But I soon discovered that cherry trees on thin soils never split, and that by removing the highly manured soil from around their roots, they will remain sound.

"Old cherry trees cannot be surfeited, but old apple trees may be. I have seen an old apple orchard seriously injured by a heavy coat of manure spaded in. In August the whole orchard presented the appearance of having been nipped by frost; the tip of every twig having a black appearance, on the top of a cluster of miserable looking leaves. JAMES FOUNTAIN. *Jefferson Valley, N. Y., December* 18, 1851.

To Farmer's Boys—A Hint.

The writer of these remarks was once a farmers' boy, and speaks from experience when he recommends all farmers' sons to keep a daily register of every thing interesting coming under their observation, relative to their business. The time of planting or sowing crops, with the results of late or early planting appended; the effects of any peculiar mode of manuring; the benefit or detriment from thick or thin sowing; the kind of seed; the time or manner of harvesting; the results of draining, of deep or shallow plowing, and of numerous other matters, and especially including the cost and profits of each crop, if accurately recorded, would not fail to yield a great deal of interest as well as usefulness. The time of the appearance of birds, insects, the flowering and fruiting of trees, or anything else in relation to nature and its productions, would assist very much the acquirement of knowledge on these subjects, if made a matter of record. I am sure it would be a delightful employment, both at the time, and by its examination afterwards.

Now, all that is necessary is to get a small blank book, with a flexible leather cover, which may be had for a dime at any book or stationary store—and rule each page into two colums—the first for the record of planting, sowing, and all other operations during their earlier stages; and the second column for the registry of the results, directly opposite, on the same page. By comparing these results with the operations which produced them, a great deal of valuable practical knowledge would soon be obtained.

Another advantage might result from this practice. When any operation was deferred till too late, and loss was occasioned thereby, make a memorandum of this fact at the proper place in the second column, by the examination of which, the second year, this difficulty might be avoided. Many failures occur from a want of seasonable attention; such a journal would therefore leave an excellent memorandum book to refer to daily the second year, or any other year afterwards, to remind one of what must be done at the time.

Would not this be worth a thousand times its cost, by way of making accurate, intelligent, practical, and successful farmers, of lads and young men in the country, besides improving their knowledge of writing? A PLOWMAN.

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WATER IN BEETS.—According to Dr. Salisbury's analysis, the fresh roots of the turnip-beet contain about 93 per cent of water, or thirteen-fourteenths, and the fresh tops about 89 per cent. This is a larger proportion than is found in the parsnip or carrot.

The Cultivation and Management of Flax.

The culture of flax is yearly becoming a subject of increasing interest to the farmers of the northern and western states, and hence the importance of disseminating through the agricultural press, the most reliable information, that can be obtained. The American farmers, so far as our knowledge has extended, have not been so successful in the culture of flax, as the adaptation of the soil and climate of the country would warrant; and this defect, in a majority of cases, may be traced to the imperfect system of management, and not to any defect in the soil or other natural cause. Having had a very extensive acquaintanct with flax growing, cultivating some seasons as high as fifty acres, and in every instance obtaining the most satisfactory returns, both in seed and fibre, for both of which purposes the crop was grown; we shall scarcely be accused of recommending details to others that were not fully treated on a large scale, and the flattering results of which, should form a sufficient reason why a similar practice may with confidence be urged upon the attention of others, interested in this department of agriculture.

Flax may be successfully grown upon land that will yield heavy crops of barley or oats. The soil should be rich, deep, and mellow, and the subsoil, if clay, should be permeable, by which the roots will extend to a great depth. The soil should not be manured for flax, but the crop preceding it may be manured with impunity, so far as relates to the flax crop, and the yield of seed will be increased and the quality of the fibre improved, in ratio with the increased quantity of manure applied for the previous crop, provided that the soil be deepened in the same ratio. It is on this account that no other preparation of the soil seems to be so well adapted for flax, as a well manured and thoroughly cultivated field of potatoes, in which case the land should be plowed in autumn, and the flax sown the following season, about the period the indigenous fruit trees of the country put forth their blossoms. Flax may be sown after other crops besides potatoes; and the next best course is to select a recently broken meadow, which had raised only one crop since it was broken, and by deep autumn plowing, and a spring plowing, and thorough harrowing and rolling, the soil will be ready for the reception of seed. The older the sod, and the more thorough the decomposition, the greater will be the yield of both seed and fibre. Almost any other crop besides potatoes, if the ground be liberally manured, and the manure be thoroughly decomposed, will answer to precede flax; but a very abundant yield of seed, and a superior quality of fibre can only be obtained upon a rich and well cultivated soil; and unless due regard be had to these particulars, it is worse than folly to hope for flattering returns.

Something more than a suitably rich soil, deep culture, early sowing and a finely pulverised soil, are necessary to obtain success in flax growing, though none of these conditions can be dispensed with, without imparing the prospect of an abundant crop. The seed should be of good quality, free from the seeds of weeds, and the quantity sown should in no case be less than two bushels per acre, which is about double the quantity of seed sown in this country. Then if there be any prospect of the crop sustaining injury from drouth, an application of gypsum, salt, and house ashes, at the rate of one bushel each of the two former and three of the latter, should be applied broadcast upon the young flax plants in their earliest stages of growth, by which a uniform and luxuriant crop will be the result.

Where pains have been taken to bring the soil to a suitable state of tilth for flax, the land may be seeded with clover, and the young clover plants will obtain a larger and richer growth, and be subject to less casaulties, than if seeded with any other spring crop. This will be especially so when the top dressing of artificial manure, recommended as above, is applied. The pulling of the flax will loosen the soil around the roots of the young clover, and thus greatly promote its growth; and where it is desirable to seed also with timothy, the latter should be sown as soon as the flax is pulled and removed off the ground. If the soil be rich, and will bear such a severe course of cropping, a crop of winter wheat may be made to succeed the flax, in which case only one plowing will be requisite for the wheat. The flax, when managed as here recommended, will leave the ground perfectly free from weeds, and the land will be in better condition for wheat than if a very expensive process of summer fallowing had been adopted. Flax, however, is a very exhausting crop, more so perhaps than any other spring crop, and the question to be decided is, whether two exhausting crops following in succession, would not tax the capacity of the soil further than prudence would warrant. Every intelligent farmer should be the best judge of this matter; and having repeatedly tested the system, on a large scale, we can with confidence recommend the sowing of wheat after flax; but invariably the ground should be seeded down with clover and timothy with the wheat crop, in order that its fertility may be again restored for future crops. In those sectious of country where the wheat plants grow exceedingly luxuriant, and are more or less disposed to rust, this great bane to the wheat growing interests, may be very materially obviated by sowing wheat after flax in the manner here described. The wheat plants by this means would grow shorter and stiffer, and would arrive at a much earlier maturity, than if the land had been summer fallowed; and as an antidote for such no system of cropping land deserves greater favor than the one here submitted for consideration. It is, however, subject to abuse by being imperfectly done, or by being repeated too frequently on the same soil. From the exhausting tendency of flax, even on the richest soil, it should not be repeated more than once in seven or eight years; and it is only advisable to cultivate the crop extensively where the soil is remarkably rich, and distinguished for the rankness of its vegetation. On soils of this description, cultivated in the manner described, from fifteen to twenty bushels of seed, and from three to four hundred lbs. of clear scutched flax, may be confidently anticipated per acre, and the profit yielded will be greater than that of most other crops, requiring an equal amount of labor and skill. W. G. EDMUNDSON. *Keokuk, Iowa, Jan.*, 1852.

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It is better to suffer wrong than to do it.

Breeding Stock.

On an influence affecting the purity of blood in Stock.

Eds. Cultivator—The breeding and rearing of stock, especially animals of high and pure blood, is daily attracting an increased attention from the scientific and enlightened agriculturist; and, when the farmer succeeds in obtaining animals possessing the qualities sought for, there is no branch of his business that *pays* more generously in dollars and cents, than this; but so many failures are met with, and so many are disappointed in the progeny of animals, of even the purest and most renowned pedigree, that even among the enlightened, it is not seldom that we hear the advantages of *blood* questioned, if not denied; and it is more than intimated that the reason why animals possessing superior qualities, owe their excellence mainly to the care that has been bestowed upon them in regard to their feed, &c. In regard to other departments of agriculture, similar discrepancies of opinion do not obtain; and it would seem of importance to determine *why* this difference of opinion in this regard?

All are accustomnd to rely upon *experience*, and it must be allowed that in this matter, many who have been to considerable trouble and expense in their endeavor to improve their stock of horses, cattle, or sheep, by breeding from animals of the improved breeds, have *experienced* a grevious disappointment, in not finding the young to resemble the sire or the dam, as the case may be, as closely as they had hoped; and without being able to account for this fact, in accordance with any laws that are known to them, and only knowing that *they* have failed of the expected improvement in their animals, they have naturally come to deny, or at least to doubt, what others have told them. This has been one, and perhaps the main reason, why so little attention has been paid by the majority of farmers, to the introduction of imported and other improved races of animals.

But the English agriculturists seem to understand the causes of these failures; and, of course, how to avoid them; and it would be well if this information were more generally disseminated in this country.

The reason is this:—*The mother's system is influenced and changed, by the young she carries in her womb, and if the male parent be of a different breed, her blood is contaminated, and she rendered similar to a mongrel, for the remainder of her life.*

This assertion may startle many, who have given the subject no thought, but it is believed that no physiological fact is better established, or more susceptible of proof, than this; and as proof, I shall cite a few instances that have been noted by Dr. A. Harvey, physician to the Aberdeen Royal Infirmary.

He speaks of a young chestnut mare, seven-eights Arabian, that belonged to the Earl of Moreton, which was covered in 1815, by a Quagga, which is a species of wild ass from Africa, and marked somewhat after the manner of the Zebra. The mare was covered but once by the Quagga, and after a pregnancy of eleven months and four days, gave birth to a hybrid which had distinct marks of the Quagga, in the shape of its head, black bars on the legs, shoulders, &c. In 1817, '18, and 1821, the same mare, (which had in the mean time passed into the possession of Sir Gore Ouseley,) was covered by a very fine black Arabian horse, and produced, successively, three foals, all of which bore unequivocal marks of the Quagga.

Another case, similar to the above, is mentioned. A mare belonging to Sir Gore Ouseley, was covered by a Zebra, and gave birth to a striped hybrid. The next year this mare was covered by a thorough-bred horse, and the next succeeding year by another horse. In this instance, also, both the *foals* were striped, and in other regards partook of the characteristics of the Zebra. It is a matter of common observation, that when a mare has borne a *mule*, she is never after fit to breed colts, as they will have large heads, and otherwise resemble mules.

In the above mentioned instances, the mares were covered by animals, in the first instance, of a different *species* from themselves; but others are recorded, where they had bred only from *horses*, but by horses of different *breeds* on the separate occasions, and yet the offspring partook of the characteristics of the horse by which the *first* impregnation was effected.

Mr. M'Gillivray, in an article published in the Aberdeen Journal, speaks of several colts, in the Royal stud at Hampton Court, that were sired by the horse *Actæon*, that did not resemble *Actæon*, the paternal parent of the foals, but did bear a *near* resemblance to the horse *Colonel*, from whom the mares had brought colts, the year previous to their being covered by the horse Actæon. Again, a colt, the property of the Earl of Suffield, which was got by the horse *Laurel*, that it was strongly intimated by the jockies at Newmarket, that he *must* have been got by the horse *Camel* by stealth, on account of his close resemblance to the horse Camel. This resemblance was, however, satisfactorily accounted for, by the fact that the mare had been previously impregnated by Camel.

Many instances of a similar character, are recorded in regard to dogs—in fact the breeders of dogs all seem well aware that if the bitch has been impregnated by a mongrel dog, that even if the father of her next litter is of pure blood, the puppies will be liable to be mongrels.

Similar instances have also been observed in regard to swine, and the breeders of cattle have recorded similar facts. Mr. M'Gillivray, mentions several instances, and among them the following: "A pure Aberdeenshire heifer was served with a pure Teeswater bull, to whom she had a *first-cross* calf. The following season the same cow was served with a pure Aberdeenshire bull; the produce was a cross calf, which at two years old had very long horns, the parents both hornless. A pure Aberdeenshire cow was served, in 1845, with a cross bull—i.e., an animal produced between a first cross cow and a pure Teeswater bull. To this bull she had a cross-calf. Next season she was served with a pure Aberdeenshire bull,—the calf was quite a *cross* in shape and color."

After citing other examples with a similar result, Mr. M'Gillivray says, "Many more instances might be cited, did time permit. *Among cattle and horses they are of every day occurrence.*"

Dr. Harvey also records many instances of similar results, as having occurred in the *human* family—but it is not thought best to include them in this paper.

This mode of impairing the purity of the blood of animals, has been styled, *crossing the system* of the mother; and it is supposed, that the reason why so many inferior animals are to be met with, the progeny of parents of pure lineage, is almost wholly owing to the blood of the mother having been previously contaminated by the cross-bred young she has carried.

Of the *modus operandi* of this contamination, there is no explanation given, which is generally satisfactory, but it seems probable to the writer of this, that, inasmuch as the *same blood* must circulate through the veins of both mother and offspring,—that the system of the dam becomes *thus* modified and rendered in a greater or less degree similar to her mongrel young.

It is hoped that the reader will excuse the *length* of this article, on account of the importance of the subject; and also, because of the *novelty* of the facts—this being the *second* instance so far as has come to the knowledge of the writer, that it has been treated of by the Agricultural Journals of this country—an article from the same pen having been published last year in the *American Agriculturist.* C. H. Cleaveland, M. D. *Waterbury, Vt., Feb.* 1852.

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The Different Hay Presses.

Eds. Cultivator—In reply to the inquiries of your correspondent in regard to pressing hay, I will give you the experience of farmers in this neighborhood, (Durham, N. H.,) where the raising market hay is the chief agricultural business. Hay was pressed for the Portsmouth, N. H., market in this town twenty-five or thirty years ago, and the first press, and only one for several years, was on the farm of N. Woodman. That press was constructed on the model of an old cotton press, then used at Portsmouth for packing hay. It was an upright box, eight or ten feet high, with one large wooden screw, coming down in the centre through a beam at the top. This was stationary. Next was used an upright box with two smaller screws one at each end and a beam across, which was brought down by the screws. This was portable, and was carried about among the farmers, and the only one in town for some years. Either of these presses with four hands and a horse, usually put up twelve bales of hay per day or about two tons. About 1830, a new patent press appeared. The box was horizontal, or upon the side on the ground. The power was applied with cast iron wheel and pinion work. About three cog-wheels and pinions were used. It was precisely on the model of the small jack screw, used in loading cotton ships at the south. Next was used the same form of box, with the power of a large rope over pulleys, instead of the wheel works. In both these presses, four hands and a yoke of oxen put up, commonly, from twenty-five to thirty bales per day, or about four tons. Both were portable. Next appeared an upright box, in which the hay was pressed down from the top as in the first two above mentioned. The power was applied by chains winding on axles, turned with same power of wheel and pinion work. This was portable and did good service. Five men turned out thirty-five or forty bales a day, or five tons and more. Next came the presses now in use. One is called the Railroad press, and patented; the other is called the Elbow press, and is understood not to be a patent. Both have an upright box, and press the hay from the bottom upwards, and the bale is taken out above, on a staging, and weighed, and hoisted away with tackle and fall. The Railroad press has for its power, two beams coming near together under the box, and there attached with a hinge joint to a strong mass of wood, called a "follower," that moves up and down the box. The other ends reach out in opposite directions, and rest upon an iron rail on a strong timber, and are made so as to move easily over it, by a solid iron truck at the end. As they stand, they form someting like the letter A, only more flat. Then by chains, and a windlass and wheel in the center, the lower ends are drawn up till they are along the rail nearly perpendicular to the ground, and parallel to each other. So the power rapidly increases as it is most required. The Elbow press is in the main constructed in the same way, except that the power is applied by two toggle joints, (the joints of iron, and the arms of wood,) standing, when the follower is down, not unlike two V's placed opposite. (<>) They are then drawn together by a chain passing round a truck in the arms just below the joints, and wound upon a windlass in the centre, which is turned by a stout yoke of oxen drawing out a rope wound on the circumference of a large wheel attached to the windlass. Five hands with a yoke of oxen, where the hay is conveniently situated, will usually press from forty-five to sixty bales per day, or from seven to nine tons. Both these are portable. One yoke of large oxen is sufficient to work either, or to move them from place to place over an ordinary road.

The Elbow press is called the best, and is here preferred to the other. Both are used extensively. Durham is chiefly an agricultural town. It has about 1,500 inhabitants. In 1830, about 100 tons of pressed hay may have been sent to market. In 1840, as much as 500 tons were sold; and at the present time, 1852, no less than 2,000 tons of pressed hay are annually sent to market. Lee, Newbury, Greenland, Stratham, Rollinsford, and other neighboring towns, are largely interested in the same product.

To secure the bales, small withes of withewood, gray beach or alder, are used, about an inch through at the butt, and from six to ten feet long. Two, of sufficient length, are twisted, and the tops lapped and wound strongly together, making a band long enough to reach around the bale and tie. Five bands are put on a bale. The withes, trimmed ready for use, cost from 30 to 40 cents per hundred. The price for pressing hay is $1.50 per ton—everything requisite, use of press, oxen, withes, &c., included.

The cost of the Elbow press is from $100 to $200, according to the excellence of the material, and the work. The Railroad Press may be a little more.

If any, among your numerous subscribers, know of a better way of pressing hay, or of securing the bales, (for this now takes all the time of one good hand, besides the cost of the withes,) we should be glad to have him give us the information through your columns—as any improvement in this matter would be hailed with pleasure and satisfaction, by the farmers in this neighborhood C. F. W. *Durham, N. H., Feb.*, 1852.

Corn and Potatoes grown Together.

Eds. Cultivator—Last spring I had a piece of land of three acres and one-eighth, which I was intending to plant with corn and potatoes. Instead of planting each by itself, I concluded to try the experiment of mixing the two crops. I accordingly planted them in the following manner: Commencing upon one side, I planted two rows of corn, then one of potatoes, and then again two of corn, and so on with the whole piece, planting the rows exactly three feet apart, and the hills about twenty inches in the rows, both corn and potatoes. The corn from three to five grains in a hill, subsequently thinned to three—and the potatoes one in a hill, the size being from one half inch to one inch in diameter. When the corn was about four or five inches high, and the potatoes just coming up, I went through with the plow, turning the furrow from the rows. The corn was then hoed, without much hilling, and the potatoes were not hoed at all. The plow was again run through, turning the furrow towards the row, when the corn was from twelve to eighteen inches high, and the whole was then hoed. This was all the cultivation the crop received.

The corn was topped at the proper time, with the exception of two rows, which were cut up at the bottom, and put in small stooks. These rows were thirty-five rods long, and when the corn was thoroughly ripe, they were husked, weighed and measured; and the produce was 12 bushels and three pecks, weighing 464 lbs. Two rows were then picked adjoining those, which were topped, and exactly of the same length, and the produce was 13 bushels and one peck, weighing 485 lbs.

I will here state that the four rows upon which the experiment was made, were treated every way alike until the time of harvest. After husking, I carefully weighed and measured a bushel from each parcel—put each in a bag by itself, and hung them up to dry, intending to ascertain the shrinkage; but in this I was disappointed by the rats getting into one of the bags and destroying some of the corn. The corn that was cut at the root, was much the dampest at the time of husking and weighing, and it is my humble opinion that here lies the grand secret which causes so many of the experiments of this kind, to result in favor of corn cut at the root instead of being topped; for who does not know that corn which is kept from the influence (in a great measure) of sun and air, by being set together in stooks, will not dry so fast as that which is completely exposed to both, as in the case of that which is topped. And the difference in the ripening or drying process, will be still greater, if the favorite theory of the advocates of cutting up be true, viz: that the juices of the stalks thus treated, continue to flow to the grain more than they do in the case of that which is topped.

In regard to the comparative value of fodder obtained by the two methods, I will only say, that when I hear persons so stoutly assert the preference to be greatly in favor of cutting at the bottom, I am led to conclude that they have never tried any other way, for the reason that I never saw any cornstalks that stood in the field in stooks, until the grain was properly cured, that I should consider of much value to place before any live stock, with any other object in view, than to produce death by starvation. I cannot help, in this connexion, adverting to some remarks on page 296 of vol. 8, of Cultivator, New Series, from which I extract the following—" It has been proved that cutting off the top stalks lessens the yield of grain." This I do not doubt is true, in comparison with letting the whole plant stand unmutilated, until the grain is properly matured. Again, it is asked—" what other plant would bear such mutilation without injury." I would, with all deference, reiterate this question, with a slight alteration—what other plant would bear such mutilation as cutting up at the root, without destruction? It is further said—" Deprive the vine of its leaves, and the grape is imperfect." I should say, deprive the vine of its roots, and the grape is destroyed. So it is with the apple, pear, plum, &c.

The utility of cutting at the root, to secure from frost, in some situations and seasons, I fully admit; but I have never been under the necessity of practicing this mode, for this purpose, as my corn is always ripe before frost, owing to my planting an early kind, and my soil being warm.

I have multiplied more words than I intended, and have not yet given you the result of my experiment with the mixed crop, with which I commenced. I harvested 335 bushels of corn in the ear, and 125 bushels of potatoes, from the three acres and one-eighth, all accurately measured. The corn was perfectly ripened, and the potatoes were the finest that I have raised for many years, there being but seven bushels in the whole too small for market. They rotted on some parts of the field, I should think enough to diminish the crop at least 25 bushels. Deducting one-third of the ground planted for the potatoes, makes the produce of corn a trifle over 162 bushels of ears per acre. The best crops here do not probably exceed 40 bushels of well dried shelled corn, when planted in the common way. F. B. *Canaan, N. Y., Feb.*, 1852.

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Specimens of Successful Cultivation.

In looking over the official account of the weekly exhibitions of the New Haven Horticultural Society, we find the following articles noticed, which, as we cannot judge of their quality at some hundreds of miles off, we give for their size. They could not have received bad treatment, and are therefore worthy of notice:—

May 21, 7 stalks of rhubarb, one measuring 42 inches in length, from E. C. Read.

June 11—2 stalks rhubarb, 4 lbs. weight, leaves 33 inches in diameter—from E. C. Read. Also, 1 cucumber 20 inches long and 7 inches round, from Prof. Salisbury.

June 18—2 heads lettuce, wt. 6 lbs. 4 oz., from E. C. Read. Also from the same, June 25, 1 head early cabbage weighing 3¾ lbs.

July 9—6 varieties gooseberries, 2 dozen of the largest weighing 11 ounces, from E. C. Read. Also, from Prof. Salisbury, 1 cucumber 26 inches long and 3¼ lbs. weight.

July 30—1 head cabbage weighing 18 lbs.—from Mrs. Hillhouse.

August 13—1 Mexican cucumber 4 feet 10 inches long —from E. C. Read. Also, 1 cabbage 14 lbs., from A. N. Skinner.

August 19—1 water melon, 27 lbs. from J. Fellows.

It will be observed that these were all made objects of public view, and the statements are unquestionably correct.

Oil Troughs for the Curculio.

Eds. Cultivator—Among all the remedies which have been proposed for the wholesale destruction of certain fruits by the Curculio, I believe there is none which is at once so cheap and effectual, as to merit general, or very extensive application. I have been led to this conclusion principally, by my reading of the "Cultivator" within the last four or five years.

The object of this communication is to suggest one believed to be new in its application, and to present some of the considerations which have induced the hope that it may be found effectual.

The remedy I have to propose, is a trough of sheet lead, (or other suitable material,) placed around the trunk of the tree, and partially filled with oil. This was tried on a single plum tree, during the past season, by Mr. Robert N. Bassett, of this town, with results as favorable as could have been expected under the circumstances. The season was too far advanced, and most of the fruit had been stung, when it was applied. On the first morning after the application, he found a considerable number of the Curculios drowned in the oil, and in the course of the season, the trough became "half filled with them." A few of the plums which had not been previously stung, remained untouched, and in a healthy state.

This application was suggested to Mr. B. by his finding several Curculios on the trunk of the tree, which he supposed were making their way up; and by his observing that when he allowed those he had taken to fly off, they never rose, but invariably took a downward direction. His inference was that they usually, at least, reached the top of the tree by climbing up its trunk, and therefore, that any obstruction placed around the trunk, would prevent their reaching the top.

To conquer the Curculio, would doubtless be one of the most important achievements in fruit culture, which could be attained. Of the extent and destructiveness of its ravages, little need be said; they are too well, and too widely known. In this section, the plum, the apricot and the nectarine, in all their varieties, are forbidden fruit. The trees grow and bear well, but this destroyer has a complete monopoly of the crop. Cherries, if too abundant to be all destroyed, are at least half "wormy" at maturity. Apples, pears, quinces and even peaches, are also very extensively injured. I presume the same may be said of every portion of the country where the soil is light or sandy.

Believing that the *oil trough*, as used by Mr. Bassett, will be found a cheap, convenient, and effectual protection against the Curculio, I am desirous that it should be suggested to the public through your widely circulating Journal, trusting that it will be thoroughly tested during the coming season.

Most of your readers who have been in New-Haven within the last dozen years, will have noticed leaden troughs, (which are partially filled with oil,) encircling the numerous Elm trees in that city. They have been placed there, and are maintained by the city authorities, at considerable expense, to protect the trees from caterpillars, which, before their use, were often so numerous as to divest the trees entirely of their foliage before midsummer. I suppose the worm is hatched upon the tree, but is apt to fall to the ground, and instinctively returns by climbing up the trunk. This being the case the *oil trough* affords only a partial protection—yet it has served to preserve a tolerable degree of verdue on the trees throughout every season since its adoption. It is a most effectual trap for every worm or insect which attempts to reach the top of the tree by climbing up its trunk, and may be found to protect fruit trees against other enemies, besides the Curculio. H. *Birmimgham, (Derby,) Ct.*

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Keeping Poultry.

Eds. Cultivator—Having heard complaints that sundry persons, who had been induced to keep barn-yard fowls in large numbers, expecting to find it very profitable, from the accounts published in the agricultural papers, have been greatly disappointed in the result of their trials, as their fowls have cost them far more for their keeping than their eggs have sold for—I send for the information of such persons, to revive their hopes, and for the encouragement of others, to make trial of means which have been found so successful in cases where the trial has been faithfully made, the following account.

A man in my neighborhood has kept through the winter, twenty-five hens. Between the 1st of December, 1851, and the 1st of March, 1852, he has sold from what they have laid, fifty dozen of eggs, besides using in his family several dozen. As the winter has been a cold one, and the ground covered with snow, most of his neighbors who keep fowls, complain that they have had no eggs. He informs me, (and he is a man who may be relied on with perfect confidence,) that he has for several years managed and kept his fowls, in the following manner. A warm hen-house, where they can come to the ground daily—poles of Sassafras for them to roost on, which drives away the lice—a mixture of food, as corn, oats, and broom-corn seed, or cob-meal scalded, and in very cold weather, a little black pepper put into it. A little before they go to roost, give them as much corn as they will eat; give them daily some pounded bones, or pounded oyster shells; he considers bones the best; and if they omit laying for a few days, he boils oats, and puts into the mess a couple of red peppers, chopped fine, and the mess given warm. He says they will generally commence laying very soon after being fed in this manner. A regular supply of water is needful. He gives them fresh meat occasionally, when he can procure it without much expense. In his operations he is a man of economy, and has found it best to dispose of most of his fowls in the spring for the table, when they are always fat, and poultry high, and eggs cheap. He has found the half blood China fowls to be the most constant layers. Jesse Charlton. *East-Windsor Hill, Ct., March* 2, 1852.

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Floors for Pig-Sty.—The following good hint is furnished by the Massachusetts Plowman: "Styes ought to have floors laid on the naked loam, in order to be easily cleaned out. Inch boards of oak or chestnut, well fastened down, and kept covered with earth will last 20 years." This earth, when well mixed with manure, is easily thrown off the floor by the shovel.

Manufacture of Manure.

Last April I took it into my head that I would like to keep a cow and pigs; but then living right in the center of a *city* of 33,000 inhabitants, I had no place to keep them, saving a woodshed of ten feet square and one story high. Well I will tell you what I did. I dug, or (as Solomon built the temple,) caused to be dug, a cellar ten feet square, and seven feet deep under my woodshed. I took two planks, say eight inches wide each, ten feet long, and laid them up edgewise one upon the other, at the bottom of one side of my cellar—and eight inches from the side, or standing bank. This space I filled with paving stones of various sizes, then with a mixture of two parts sand and one of cement, thin enough to run into all the intersties, I filled in until it became full to the top of the stones; whilst this cement was setting, I would serve another side the same, and so on all around the sides. In this manner I made the sides of my cellar seven feet high. Then I paved the bottom and filled between the stones with cement as above, so that my cellar is water tight.

It took 9 casks of cement, at $1.50 per cask,....	$16 20
2 loads of sand,........................	1 25
	$17 45
Teaming of stone picked from my own land,...	3 00
Labor of an Irishman, six days,...............	5 00
Superintendency by myself, do.,................	$25 45

I raised my shed one story for a hay loft, and floored the bottom. Now I have a good pig pen and cow barn. I have ample cellar room under my dwelling, main and S. front, say 20 by 70 feet, *dry* and *good* for wood, which I have cut in the street, and pitched into a cellar window.

But *manure,* that is the sujeet. With one pig and with the help of a cow during nights, from April to November, by throwing in scrapings from woodshed, and what litter and dirt would naturally accumulate about the house and yard, to do which I paid out $1.50 only, I made three and a half cords of manure, for which I was offered $4.50 per cord by several individuals; it was considered better than stable manure. The cellar being water tight, I found it indispensably necessary to throw in as much dirt as I did, for the hog to work upon, otherwise I should have lost him in the *mire.*

Therefore, if any one will make such a cellar, or pigsty as I have, I do not see how he can *avoid* making, say seven cords of manure, from one cow and one pig, in the course of a year. The cow of course stands over the cellar by which means the liquid as well as the solid manure is saved.

If you let your cellar become so wet as to get the pig mired, and he die, then of course you do not get your seven cords of manure, but if you will throw him meadow mud, loam, or chip manure enough to keep him tolerably dry you will get your amount. This also would be a good receptacle for soap suds and sink water, but if you put these in, you will have something to do to keep it dry. I am afraid your heap would necessarily increase to ten cords.

Some of your readers, (should you deem fit to publish this) will say, verily, this is book-farming with a vengeance, but it is the result of actual experiment. Water cisterns, vaults to privies, and especially barn cellars, may be built in the way above described, cheaply, permanently, and good. But short communications, I like to have forgotten. Yours truly, **George Mansfield.** *Lowell, Mass., Feb.* 1852.

Theory and Practice.

Many cultivators insist that the most vigorous young grafted trees are produced by selecting and inserting the most vigorous shoots; that straight, upright shoots, will make straight trees; and side-ascending shoots will make bow-shaped trees; and that grafts taken from very old trees will not give us such durable specimens as those taken from such as are young. This appears to be theory, exclusively, and it is repeated by various writers with all the confidence afforded by long trial.

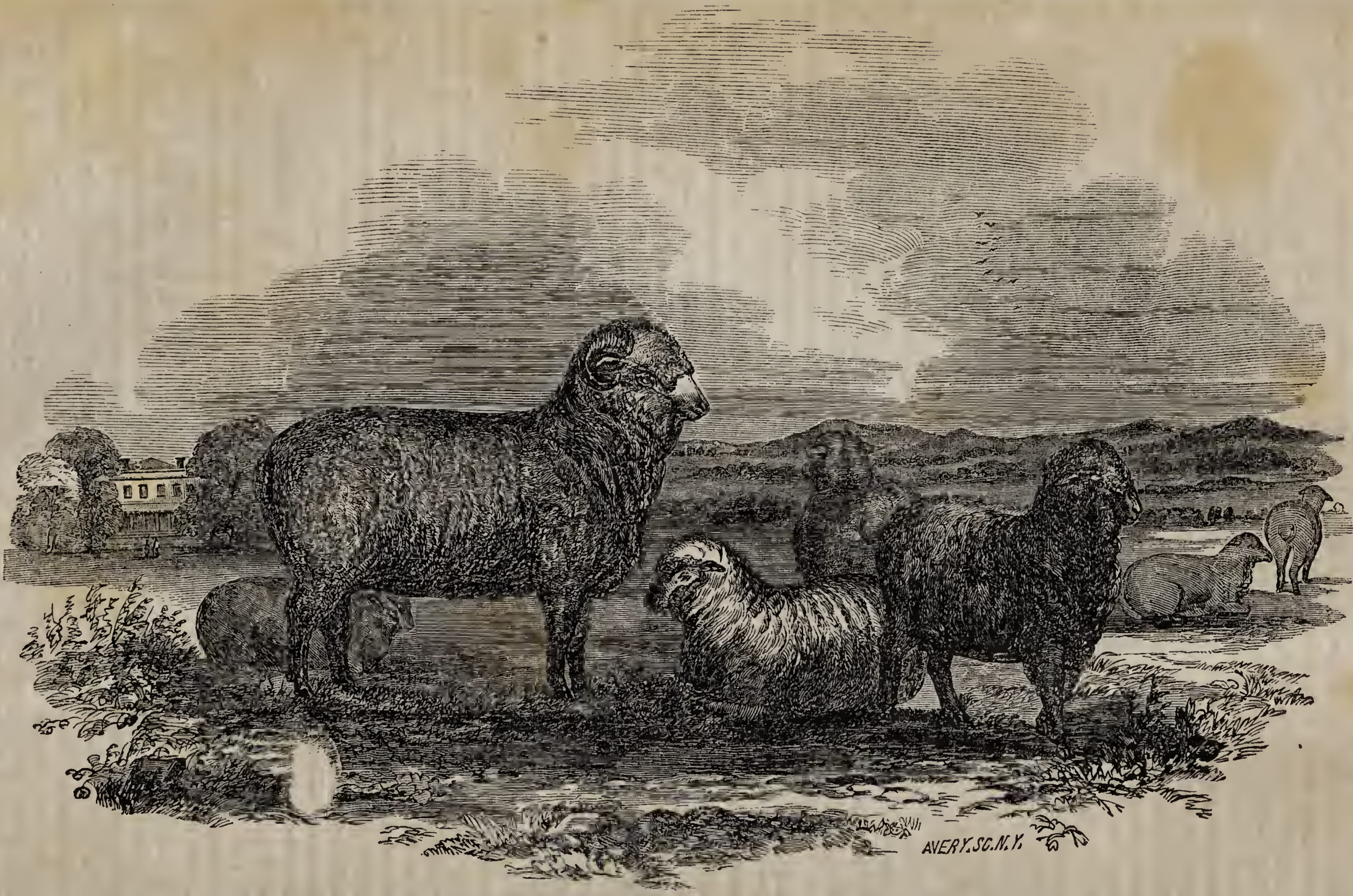
Now, for one or two items of practice. Some years ago, we tried a large number of experiments, by cutting, first, a bundle of grafts from very vigorous, straight, and upright shoots, on a bearing apple tree; and secondly, a bundle from the side shoots, all of which were curved or crooked. The grafts were inserted at the ground, into contiguous rows of stocks. For five years, not the slightest difference in growth could be observed. Again —a writer in the Gardener's Chronicle informs us that in 1824, owing to a large removal of old trees, he took grafts from more than four hundred, which were in "a state of complete decripitude," and putting them on healthy young stocks, they have all grown with remarkable vigor. "These trees, from twenty to twenty-six years old, and of which many had attained the height of more than thirty-six feet, all bore fruit in prodigious quantity, and were free from original disease, when they fell under the axe."

The truth is, the opinions referred to above, should not be dignified with the term "theory;" they are mere hypothesis—notion. Theory teaches the reverse—that is, that the eyes or buds which annually form, and thus continually produce new individuals, will multiply and grow perpetually, so long as they are not impeded or obstructed by external causes; which causes may be in the shape of bad soils, ungenial climates, bad cultivation, or from being located on very old and stunted trees which cannot furnish the necessary nourishment.

Analysis of the Strawberry.

B. **Kirtland** gives the following analysis in the Family Visitor, showing a large amount of potash in proportion to other constituents, much silica, and more magnesia and common salt, than are usually found in other fruits. One hundred and sixteen grains of the ashes were taken, prepared from the leaves and stalks immediately after they had borne a moderate crop of fruit.

Silica,............................	6.117	grains.
Charcoal and sand,....	3.101	do
Perphosphate of iron,.....................	1.515	do
Perphosphate of lime,.....................	26.519	do
Magnesia,.......	8.908	do
Sulphuric acid, ...	1.469	do
Phosphoric acid, ...	6.970	do
Chlorine,............................	.708	do
Potash,..............................	33.154	do
Soda, ...	2.790	do
Carbonic acid,..........................	23.008	do
Organic matter and loss,.	1.739	do
	116.000	do



GROUP OF FRENCH MERINO SHEEP.

The property of S. W. JEWETT, Weybridge, and H. S. MORSE and O. F. HOLABIRD, Shelburne, Vt.

Sheep Husbandry.

Eds. Cultivator—In your February number, I notice a communication from "W. M'C.," of West Hebron, Washington county, N. Y., on the subject of heavy and light wooled sheep, and I think his remarks on the subject are well worthy the attention of all wool-growers; though I think he makes the difference between the classes he mentions, greater than generally exists; forty-four cents being a less price for wool that has any just pretensions to a Saxony stamp, and four and one half pounds being a greater weight than many Merino flocks will average. I think that a wool-grower, that does not make a fine flock average more than two and three-fourth pounds, and worth only forty-four cents, will hardly make a Merino flock shear four pounds, worth forty cents; as I think much of the profit depends on breeding, selecting, feeding, and attention; and that the same care that would make the fine flock yield three pounds, worth from forty-five to forty-eight cents, would make a Merino flock produce four and one-quarter pounds, worth forty cents; leaving the difference between the two, about thirty cents, and that is certainly of sufficient importance to claim the attention of all interested in growing wool. I have had considerable experience in growing wool, having been engaged in the business for thirty-five years, and having had the same flock without changing for twenty-five, which I bred for about ten years, with a view to make them fine; but finding their fleeces too light, and their constitution too tender for this climate, I determined to increase the weight of fleeces as fast as I could, without materially injuring the quality, and have succeeded so far as to make my flock, consisting of ewes and lambs, (as I keep no wethers,) shear three and three-fourth pounds, which sold at the depot in Kinderhook, in January, for forty-seven cents a pounds, making one dollar and seventy-six a fleece, including commission. My sheep have long staples, thick wool, very free from yolk; have strong constitutions, and are perfectly healthy, not one in two hundred and fifty having been ailing in any way, to my knowledge, this winter; and when I can get them up to four pounds per head, with about the quality they now have, I shall have accomplished all I ever expected to.

I have no doubt my flock would have shorn some two ounces more per head by this time, if I had not, some four or five years ago, sold all of two stocks of young ewes, and though I obtained a large price, I think I lost by the operation, as in consequence of that sale I have not been able, till last year, to raise the average weight, over about three and one-half pounds. I have no account of more than four sales, though mine has always been sold at the depot in Kinderhook since its establishment. Those sales have all been made in the winter. In 1848, it sold for forty cents, and for the three last years for forty-seven; showing that there has been no variation in the price of such wool; and I see by reference to my bills, that the assorting has been very uniform. The prices of low and medium wool, have been more fluctuating, and I understand that such wools are now dull, and that the prospect for another year is not flattering.

As my object in writing this, is to induce wool-growers to take more pains in breeding and managing their flocks, and as any knowledge I may have acquired, I am free to communicate, I shall briefly state how I have managed to make mine differ from most others.

In the first place, I have kept few or no wethers; consequently have raised a large number of lambs in proportion to the number of my flock, and have been able to sell about the number I have raised; and always, (except in the instance mentioned above,) have selected such as were most imperfect; making such selection when I tag them. I have made but little use of bucks of my own raising, but have procured the heaviest fleeced, stoutest built, and strongest constitutioned ones I could, without much reference to trouble or expense; and when I have found one near right, have used him as long as he remained vigorous, on old ewes not related to him. I think a judicious selection of bucks for any desired improvement, the most difficult matter that falls to the lot of a shepherd; and for that reason I have practiced using a strange buck on a few sheep, so as not to suffer too much, if he should make a bad cross; and I never buy a buck out of a flock that has not been well bred for a long time, fearing their stock may run back on some defects of their progenitors. It is well understood by all who are conversant with the subject, that no important, desirable change in any breed of animals, has been made in a short time; but rather that it takes a long time, and much attention, to produce a breed that will generally have the particular qualities desired. If, then, we are negligent in this respect, we cannot expect to improve. The principal reason why we have so few good flocks, is, because sheep-owners are so frequently changing them. This beginning every few years anew, gives no opportunity to become acquainted with the desirable qualities of particular animals. Such exist in all flocks that have any pretensions to excellence; and families, or the descendants of particular sheep, may be traced by a discerning person, in any flock of long standing; thus a little attention to any particular defects, such as coarse flanks, thin wool, or short or long toes, may be extirpated from a flock by disposing of such as possess them.

I think it important for every wool-grower to know how his wool assorts, to enable him to know whether he is going astray, or not, in his efforts to improve; and this is one important reason why I approve of the depot system of selling wool, and the more I see of its operation, the more I am convinced that it is for the interest of all who intend to have a good article, and in good order, to have it sold in a systematic way. Any excitement among speculators, which raises wool above its value to the manufacturer, invariably creates a reaction, and a decline on the next clip, which will more than counterbalance the advance on the previous one. Daniel S. Curtis. *Canaan Center, N. Y., March* 6, 1852.

Eds. Cultivator—Noticing a communication in the last number of the Cultivator, in regard to heavy and light wooled sheep, by W. McC., in which he asked for information, "where there are any of those fine Merinos, such as were common before the introduction of Saxony sheep, which cut heavy fleeces, with but little waste," I thought it might be for the interest of others, as well as my own, to give a short description of my sheep, which I think would answer your correspondent's description.

Although it would be unnecessary for me to go back to the origin of my flock, for those who have taken the Cultivator for eight or ten years past, yet for those who have not the back vols. I will do so.

The stock from which my flock have been bred, were purchased by my father, of A. Hull, of Vermont, in January, 1839. Mr. Hull purchased his stock of the Hon. Wm. Jarvis, soon after he mixed his different flocks or classes of Merinoes, together, and as they approached nearer the Paular variety than any other, from Mr. Jarvis' description of the several varieties, which he gave in Cultivator, vol. 1, of New Series, page 127—they have been classed as Paular, being "of middling height, round bodied, well spread, straight on the back, the neck of the bucks rising in a moderate curve from the withers to the setting on of the head; their head handsome, with aquiline curve of the nose, with short, fine, glossy hair on the face, and generally hair on the legs; the skin pretty smooth, that is, not rolling up or doubling about the neck and body, as in some other flocks; the crimp in the wool was not so short as in many others; the wool was somewhat longer, but it was close and compact, and was soft and silky to the touch, and the surface was not so much covered with gum."

The above description of the Paular sheep, which I have quoted from Mr. Jarvis' communication, will nearly answer the description of my sheep at the present day, except that most of them are covered with wool on the legs, instead of hair.

It has been the constant aim of my father and myself, to increase the quality of the wool, combined with the greatest length of staple, and weight of fleece, and nearly free from gum. My present stock consists of about 80 ewes of the Jarvis stock—50 ewes and 30 bucks, a cross of the Jarvis and French Merino, from a buck of the Taintor importation, which are very superior for quality of wool, and 50 lambs from Jarvis and half blood French ewes, and an Atwood buck, which now promise to be very superior shearers.

My flock, for the last four years, has averaged from four and a half to five pounds, according to their condition and age. When my flock were all in good condition and good age, the average went as high as five pounds five ounces—bucks from eight to twelve pounds. For the last four years, my wool has sold for from 35 to 42 cents, selling soon after shearing.

If your correspondent, or others, should wish sheep from my flock, I will sell a few at prices as reasonable as could be asked, when the first expense of getting the sheep, and care in breeding is taken into consideration. Samples of wool will be sent to any who may ask them, and any other information in regard to the sheep, will be cheerfully given. A. H. Avery. *Galway, Saratoga Co., N. Y., Feb.* 7, 1852.

You may inform your correspondent, W. M'C., that I have pure Merinoes, such as he inquired for, and will sell at reasonable prices. The last clip averaged four pounds nine ounces per fleece—sold immediately after shearing for 40 cts. per pound. So fine, white, clear, and clean was it, that the workmen in the factory said it was Saxony, (forgetting the heft of fleece.) Inclosed I send you a sample of one ewe, whose fleece weighed five pounds, and one from one of her lambs, sired by Scipio, whose fleece weighed eight pounds three ounces. B. H. Andrews. *Waterbury, Conn., Feb.* 11, 1852.

In the Cultivator of last month, is a communication from W. M'C., inquiring after heavy fleeced Merino sheep.

We have a flock answering the description inquired after. Our breeding ewes, 100 in number, shear from four to five pounds per head, of clean washed wool. This we sold in June last for 44½ cents per lb. This weight is obtained on very ordinary keeping, without any grain.

These ewes are now dropping their lambs, from a French Merino buck imported in June last—his weight is over 200 pounds, and weight of fleece from 20 to 25 pounds. If the wool-growers in Washington county are desirous of increasing the weight of their fleeces, and keep up the quality of wool, they can be accommodated. L. and A. Whiting. *Torrington, Conn., March* 8, 1852.

Jackets for Sheep.

Every one familiar with the management of sheep, must be aware of the great importance of shelter in winter. A skilful farmer once informed us, that in consequence of the abundant protection by buildings, which he gave to his sheep, he was enabled to reverse the common rule in relation to their loss—he lost less in winter than in summer. An English writer says that an extraordinary reduction in the amount of disease and death has been effected by the use of jackets or small blankets applied to such animals as were necessarily exposed to all weathers. Coarse woolen blankets constituted the material; the jackets were 23 inches by 16, and the cost four pence each. Dr. Lee says that a breeder in Vermont, covers the back of each sheep with half a yard of common sheeting, painted, to shed rain—a cheaper material than wool.

"A Little Farm Well Tilled."

We have seldom known a better illustration of this expression, than is given in an account of a farm of fifty-six acres, belonging to Erasmus Littlejohn, of Middlebury, Mass. This farm was entered for the premium offered by the Plymouth County Agricultural Society. The premium was offered in 1848, payable in 1851—reference being had to the products of the years, inclusive. The 56 acres consist of 22 acres improved land, 12 acres unimproved, (now mostly planted to forest trees,) and 22 acres of woodland. The soil of the cultivated part is described by the committee who examined it, as mostly sandy and gravelly, except several acres of swamp, which have been brought into excellent meadow. Since 1848, he has raised on the 22 acres comprising the cultivated part of the farm, 488 bushels of Indian corn, at an average cost of 21 cents per bushel; 51 tons of hay, at the cost of $4 per ton; 484 bushels of potatoes, at 22 cents per bushel, "besides other vegetables." The report states that the net yearly profit on his farming operations, after deducting interest on the cost of his farm, labor, &c., were in

1848,	$561 54
1849,	582 31
1850,	610 81
1851,	810 92

A daily account has been kept of every item of expense on the farm, and credit given for products at their market value, or realised sales.

Suggestions for the State Agricultural Society.

EDS. CULTIVATOR—That the State Agricultural Society has accomplished much for agriculture, no one will deny—that it might do more, is, I think, equally evident. Its annual fair, the premiums on farms, and essays on subjects of vital importance to farmers, and experiments to settle disputed theories or establish new facts, have each in their way tended to impart knowledge to the reading and thinking portion of the community. But there are others, and I regret to say that I fear the most numerous class, who are little benefitted by all this; they must have knowledge thrust upon them or they will not heed it; and it must be afforded them almost, if not entirely, free of expense, or they will even then reject it. They grudge the smallest expenditure, unless they can see clearly its return with a profit; the one dollar a year for the "Cultivator," or any other agricultural journal, is money so completely thrown away, that they feel themselves insulted if asked to subscribe.

It is in behalf of this class that I wish to say a few words. "The greatest good to the greatest number," should be the motto of the Society. The publication of tracts for gratuitous distribution, on subjects of direct practical benefit to every farmer, where the *profit* of the experiment is clearly portrayed, seems to be a proper initiatory step. These being received and read, the ice is broken; the mind has been turned in the right direction; an inquiring spirit is provoked, and the way opened for the introduction of agricultural periodicals and books. It is not necessary here to enlarge upon the topics to be treated of in this way; they will suggest themselves to any member of the Society; suffice it to say that they should have a direct practical bearing, and be on subjects of importance to every farmer.

The system of popular lectures, is another mode of disseminating knowledge. The Society could, at a small expense, procure the services of a few gentlemen, who should devote the winter months to travelling to the principal towns in each county. The state should be districted, for the purpose, and each county supplied, which would agree to pay the travelling expenses of the lecturer. These would be inconsiderable, for enough could be found I trust, who would take their horse and cutter for one day, and deposit him safely at the next town; or if the distance be too great, to be met by a committee and divide the space between them. In this way he could travel from town town throughout his district, at a mere nominal cost to any one. At the end of each lecture, a collection might be taken,—the sum raised to be forwarded to the State Society towards defraying its outlay.

Perhaps the most difficult part of the undertaking would be the selection of suitable persons to perform this duty. To combine a thorough knowledge of practical agriculture, with so much of theory and science as shall be suited to the capacity of those for whom the lecture is intended, is the great desideratum. Ultraism, Mr. Editor, is the curse of our country. I care not on what occasion it is manifested; whether in abolitionism or disunion, red-republicanism or absolutism, it is equally to be deprecated. The case of agriculture is not different. The mere mechanical drudge, who toils day after day, exercising but little more judgment than the cattle he is driving; the man who undertakes to reduce farming to a science, and who, fresh from his laboratory, issues his orders, and expects every thing to go on according to theory, will neither of them make a successful farmer. It is by a proper blending of the two, and studying nature in her various changes, accommodating oneself to the circumstance of soil and climate, and taking advantage of every new suggestion, testing the same by actual experiment, that we can hope to succeed in our profession. It is this ultraism, which should be avoided in the selection of lecturers. If proper men be chosen, I have no doubt a great benefit would be experienced, not only by the farmers themselves, but by the community at large. I have noted down these ideas, as they suggested themselves to me; the plan is worthy of consideration, for I desire that agriculture should adopt the motto of the State, "EXCELSIOR."

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Agricultural Journals.

There is no better proof of the rapid progress which is making, both in the improvement of the minds and the soils of our farmers, than is found in the increasing demand for agricultural works, both books and journals. Though we have, more or less new books on rural matters every month, the market is by no means overstocked. There is also a constantly increasing demand for agricultural journals; quite a number of new ones have been recently established, and all, or nearly all, both old and new, appear to be in a most healthy and vigorous condition. These facts show that our rural population, not perhaps as a body, but in large numbers, have had their prejudices against "book-farming," dispelled, and are now earnestly seeking for that information so necessary to enable them to manage their business most advantageously. We rejoice to see this spirit, and trust that it will extend itself until all our farmers shall esteem the aid afforded them by the press, as highly as do the members of the various professions.

The following have been added to the list of agricultural journals, since the commencement of the present year:

THE FARMER'S MONTHLY VISITOR, Manchester, N. H., 32 pages, octavo, monthly, $1 per year. Edited by C. E. Potter, and published by Rowell, Prescott & Co. Agricultural, biographical and miscellaneous.

THE GREEN MOUNTAIN FARMER, Bradford, Vt., semi-monthly, quarto, $1. L. R. Morris, editor; Morris and Bliss publishers.

THE NEW-ENGLAND CULTIVATOR, Boston, 32 p. octavo, $1. R. B. Fitts & Co., publishers.

THE PLOW, New-York, 32 p. octavo, monthly, at 50 cents, has taken the place of the American Agriculturist. Solon Robinson, editor; C. M. Saxton, publisher.

THE NEW-YORK FARMER, Rome, weekly at $1.50, and monthly at 50 cents. Elon Comstock, editor and publisher.

NORTHERN FARMER, Clinton, N. Y., monthly at 25 cents a year. T. B. Miner, editor and publisher.

WESTERN RESERVE FARMER ANE DAIRYMAN, Jefferson, Ohio, semi-monthly, $1. R. M. Walker and N. E. French, editors; G. B. Miller publisher.

OHIO FARMER and MECHANIC'S ASSISTANT, Cleveland, weekly, $2. Thomas Brown, publisher.

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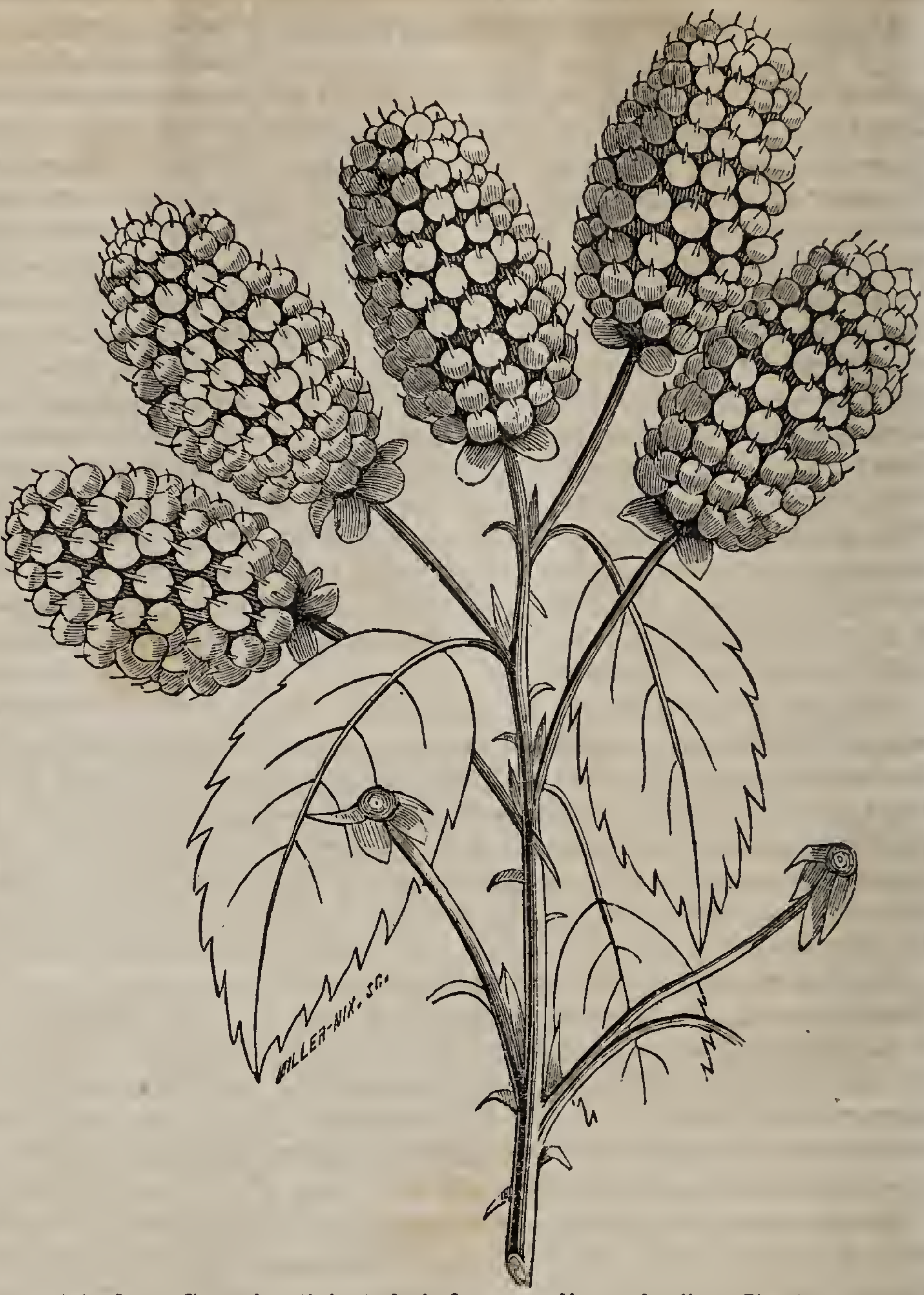
The whole world has taken the place of Rome in granting indulgence to the rich.

Culture of the Blackberry.

In answer to an inquiry on this subject, we copy the annexed remarks and engraving, from Hovey's Magazine.

"The blackberry is likely to become one of the most esteemed of the smaller fruits. Since the introduction of the improved variety, about six or seven years ago—of which we have heretofore given several accounts, and whose cultivation has been so well detailed in our last volume, by Capt. LOVETT, of Beverly, who has been one of the most successful growers of the fruit—it has been very generally disseminated; and, the past year, many remarkably fine specimens were exhibited before the Massachusetts Horticultural Society.

"The liberal premiums offered for this fruit, by the Society, have had the good effect of producing very general competion; and so superior have been some of the specimens—so much larger than when first exhibited, evidently showing what care and attention will do for this as well as other fruits—that the Society have deemed it advisable to offer a high prize for a seedling, with the hope of still further improvement; for, although what few attempts have been made in this way, have not been attended with very favorable results, there is still good reason to believe that it will yield to the ameliorating influences of cultivation, as well as the strawberry, the gooseberry, or the raspberry.


MILLER-NIX, SC.

"Our engraving represents a single cluster of the blackberry, of the ordinary size, under good cultivation. Several of the berries exhibited by Capt. LOVETT, C. E. GRANT, and other amateurs, the past season, measured *one and a half-inches* in length.

"We can commend the blackberry to all lovers of fine fruit, as one which should in no case escape their attention. A dozen vines, when well established, will yield sufficient fruit for an ordinary family. For its cultivation we would refer to the article of Capt. LOVETT above mentioned; merely remarking that the berries should be allowed to *get fully* mature before they are gathered; otherwise much of their excellence is lost. They will drop from the stem, upon the least touch, when quite ripe."

Leaf-blight on Pear Seedlings.

ISAAC HILDRETH, who has long been engaged in raising nursery seedlings or stocks on a large scale, and who is a close observer as well as skilful culturist, has furnished some interesting facts on the leaf blight to a late number of Moore's New-Yorker. He considers the cause to be a parasitic fungus, like the rust in wheat; which is corrobated by repeated instances of its being borne through the nursery in the exact direction of strong winds, and in one case by a stream of water, carrying, as he thinks, the minute seed. He is therefore of the decided opinion that the only way to raise pear stocks with any prospect of success, is to select a piece of ground far away [miles] from any nursery where this malady has ever existed, and which has never been used for growing trees, and then cultivate the plants by tools never used in a nursery; for a single tree affected will soon poison by rapid multiplication, all the rest. A piece of old meadow or pasture, manured highly with well rotted stable manure and leached ashes, as much of the former as can be plowed and worked in, is particularly recommended; and thorough and clean cultivation, to impart health and vigor, is highly essential. By adopting this course he has been eminently successful, although formerly a large sufferer by blight.

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HYBRID PERPETUAL ROSES.—We have often thought that one dozen sorts of Hybrid Perpetuals, *well selected*, would contain about all that is essentially desirable, although every cultivator might make a different selection, and different soils and localities would also have an important influence on the list. Hence the nurseryman who supplies them must have a greater number to pick from. Nevertheless, some of the greatest rose culturists are reducing their numbers. Rivers has brought his list *down* to *sixty-seven*, although a less noted neighbor retains his *one hundred and ten*.

Black Knot on Plum Trees.

Eds. Cultivator—There has been much speculation and research for the cause of the black knot on plum trees. Some persons have supposed it is caused by an insect. Some years ago I opened the knot and examined it, but did not discover any appearance of an insect, nor the eggs of one. So far as I know, it has not been satisfactorily learned what causes the knot.

The gardens of my adjoining neighbors are full of plum trees. All the trees are filled the black knot, so as to appear as if a flock of small birds had lighted on the branches. Some years ago, I advised the owners to cut off the knots so soon as they appeared, or they would lose the trees—they thought best to leave them to the course of nature. The second and third set of their trees are now in the condition I have described, while my trees are free from knots. I have always looked for knots, when in the garden, and when one appeared, I cut it off at any season, whether it was loaded with fruit or not. The trees soon put out other shoots, which filled out the place of the limb cut off, and my trees are in full size, as if no limb had been cut off, and there is not a knot to be seen on them. From this treatment, I am of opinion, that if a knot is suffered to remain on a limb, the disease soon spreads, like a canker, and fills the whole tree, as it has the trees of my neighbors. It is a misconception, that when a tree is set, it does not require further treatment.

Many years ago, I was in the habit of writing for the Cultivator, when it was conducted by our quondam friend, Judge Buel, and since, under your management; but, of late years, I have abstained from writing, because the type-setter has been so extremely careless or officious, as to add what I did not write, or substitute other words of different meaning from mine, thereby destroying the true sense.

I'll mention several cases. I gave a recipe of my mode of curing pork hams, by saying, that I put them into pickle of salt and saltpetre, after rubing them with sugar or molasses awhile before. The type-setter added, that *I rubbed them full of fine salt.* Another instance: I wrote, that Education formed the Gentleman and Christian. To illustrate this, I wrote that the delicate ladies of our cities, were too effeminate to walk the paved streets, except in fine sunny weather; and contrasted it, by saying, that when the country was a perfect wilderness, a single family settled near to Oneida Lake. *The son* said, that when his mother sought her cow in the woods afternoon, and did not find the cow, she made her bed *where* the night overtook her. The type said *when* the night overtook her, which spoiled the figure, as all animals take rest *when* night overtakes them, except wolves, thieves, bats and owls.

In another article, in speaking of the fleetness of the whale, as he appears to move leisurely, when he rises to breathe; the distance he has passed, shows that he moved like a steam engine, as he sculls with his tail, it being flat. The type said *he sails* with his tail. Yet another is within my recollection. In stating how the French peasantry of Lower Canada retain the ancient manners of their forefathers brought from France, that when they butcher a fat hog, they *singe off the hair with lighted straw*. The type said, *with feathers*. Ridiculous. I am entitled to a place in your Cultivator for the correction of these aberations, to ward off the ridiculous, to those who shall read my former communications. Respectfully, David Tomlinson. *Schenectady, March.*

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Prices of Land in Virginia.

Eds. Cultivator—It is possible I have before troubled you with a communication of the like tenor; but I have received many hundreds of letters the last few months, from those desirous of emigrating, or making inquiries in relation to Eastern Virginia. I would say it is perfectly useless for a man without some means, (say $1,000 and upwards,) to think of emigrating here. There is no worse country for a very poor man; but with means as above mentioned, many excellent locations can be found. Most want a farm of 100 to 200 acres, well situated, suitably divided into tillage, pasture, mowing and woods. Woods and tillage are plenty. The other part is not here. The prices may be as follows: The writer knows a farm for sale, 18 miles from the city of Petersburgh, directly on the railroad, of 800 acres, 400 original growth, very comfortable buildings, at $5,000—one adjoining of 150 to 170 acres, (the writer's,) trifling improvements, mostly in woods—the timber will twice pay for the land, $600—one adjoining, 550 acres, much very good land, $2,000—one two miles from the last, 275 acres, comfortable buildings, $1,200—one adjoining, 1,300 acres and upwards, $5,000, large house, &c.; and probably there never has been ten bushels of grass seed sown on the whole. The lands above mentioned are rapidly rising in value, as many are commencing to improve their lands, by use of lime, marl, guano, &c.; and abundance of lands that three years ago would not produce five bushels of wheat per acre, will now and did the last season, 15 to 20, and that with very moderate improvement. In fact, everything that can be raised in the State of New-York, can be here, and with the same labor, in as great abundance. No country is more healthy, and railroads, &c., diverge in almost every direction. Those that see fit to address the writer, may address box 271, Petersburgh, Va.; and it would be useless for any one to waste money in time and postage, unless they have means as above.

Peach trees are now in bloom—oats, &c., are generally sown. Wheat, generally, looks backward. S. Clark, Jr. *Petersburgh, March* 16, 1852.

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Salt as Manure.—The Editor of the American Farmer, says he has tried lime and salt, broadcast, upon part of a field of corn, the remainder of the field being treated with lime alone. Both parts had been well manured, and yielded well; but the part salted continued moist throughout the season, the other suffered much from drouth. He does not state the quantity applied. He thinks it would be an excellent dressing for grass lands.

The Corn Crop and California.—Professor Mapes says, "Our corn crop is now over 700 millions of bushels, and may be doubled on the same number of acres, by judicious manuring and cultivation. Seven hundred million bushels, if exported either as corn or lard oil, would produce $350 million dollars, and an increase of only ten bushels per acre throughout the country, would if exported, return us more gold than twice our receipts from California." Are not the home diggings the best?

ANSWERS TO INQUIRIES.

Tight and Open Barns.

L. C. B., of Middlebury, Vt., wishes to know "whether barns made as tight as possible, by double-boarding or battening, are preferable for keeping hay, to those built in the usual way."

There is no valuable portion in hay that is volatile, without decomposition or fermentation. Hence the common opinion, that in pitching over a load of hay in the open air, a large part of it is dissipated, is entirely erroneous. It may become dryer and lighter by the evaporation of moisture, but simple moisture is not nutriment. An acre of dry hay contains as much nutriment as an acre of green hay, although it may not possibly afford quite so much benefit in feeding, in consequence of not being so well assimilated, and it would be singular indeed if a ton, by a few minutes exposure to the wind, should lose a quarter of its substance, when a ton of stable manure requires weeks or even months, attended with constant, heavy, and fœtid exhalations, to lose a like amount. No doubt the notion originated from its light and loose condition causing more show than substance.

We cannot therefore perceive any disadvantage in an open barn, provided it shelters hay from the weather—neither does there appear to be any bad result from a tight barn, for the hay in the center of a large stack perfectly excluded from air, is not essentially unlike the exterior.

Value of Cobs as Food.

C. D. Bent inquires if there is "a certain flinty indigestible substance contained in cob-meal, or meal made from the ears of corn, that is very injurious to horses and cattle as a constant food."

We have heard intelligent farmers say that they would as willingly give horses fragments of pounded glass mixed with their food, as to feed them with cob-meal, on account of the small "flinty" pieces it contains. This is no doubt, too strong a view of the case, for we have known such food given regularly to working horses, for successive months, not only without producing sensibly any bad results, but they continued in as good order as on other food. Those *flinty* portions, however, are an evident annoyance to them, and if mills which grind corn in the cob, had a coarse sieve attached, for removing the coarser portions, the meal would doubtless be more valuable than that of the grain merely, from an equal weight of ears. Cattle, possessing more powerful digestive organs, do not appear to regard those objectionable portions.

According to Dr. Salisbury's analysis, the weight of cob is about one-quarter of that of the grain, and they contain about one half as much sugar for a given weight, as the latter. Their ashes contain a much larger proportion of potash, than that of the grain. But the chief constituent of the cob is woody fibre, forming about three-fourths of the whole, and it is the harder parts of this fibre that constitute these "flinty" lumps, so called, which are deemed most objectionable. But this fibre is not wholly without its use in going to support respiration and sustain animal heat, according to the well known principles of animal economy. Hence, though not rich in nutritive matter, the cob may be regarded as possessing some value, the only object required being the removal of the harder portions, as already suggested.

Ashes as Manure.

Wm. P. Bedell of Coxsackie inquires the best way to apply wood ashes to soils, "and on what kinds of vegetation it is most beneficial—the quantity necessary—when to be used, and the value per bushel to the purchaser."

We have much theory, and very little accurate experiment, on the application of ashes as manure. Theory is of great value, or rather it becomes so, when submitted to the test of varied, repeated, and rigidly accurate trial, in connexion with weighing and measuring. Guess work and vague estimate may satisfy the experimenter, but not the public. For these reasons, we are unable to give our correspondent much definite information on the subject.

Ashes are generally most useful on soils which have been long cultivated; because, as they are the mineral portion of plants, they supply the deficiency which has been caused by long cropping. Sometimes, however, new land is much benefitted, where the soil is naturally deficient in some of the constituents of ashes. Analysis may assist in pointing out such deficiency; experiment is an excellent mode of determining. Ashes will be beneficial to all crops on soils which lack its ingredients; the inquiry should therefore be, on what *soils*, rather than for what *crops*, is it most useful?

The quantity to apply, it is obvious, must also depend on the condition of the soil—it is not usual, however, to give a dressing of more than a few hundred bushels per acre. An analysis of the soil might exhibit the degree of deficiency, from which a calculation could be made of the amount needed by a growing crop; but such a calculation could only be regarded as a guide or illumination to experiment—the latter, carefully conducted, being the final test.

A good time for the application is in autumn, the moisture dissolving the soluble parts, which become well diffused through the soil before vegetation commences in spring. The time of year is not a matter of great moment, unless very large quantities are used.

As for the *mode* of applying—the object, plainly, is to incorporate it with such portion of the soil as the roots feed in; hence if worked in by a strong harrow, two horse cultivator, gang-plow, or even with a common rather shallow running plow, it will answer a good purpose, but when the two latter implements are used, the ground should be well harrowed first, after the ashes have been spread over, in order to mix them well with the earth.

Orchard Insect---Canker Worm?

A correspondent at Bristol Centre, Ontario co., N. Y., who has omitted to give us his name, states that about four years since, four trees in the center of an orchard were attacked by an insect that destroyed all the leaves, and have now spread all over the orchard. The past year every tree was stripped—the mischief was done early in summer, and not only leaves but young apples eaten. When stripped, the trees appear as if scorched by fire.

This insect is either the *Canker-worm*, so destructive in some parts of New-England, or one nearly allied to it in habits. The reason of its spreading so slowly, is doubtless owing to the female perfect insect having no wings, and therefore being unable to travel far in laying its eggs. This is the case with the canker-worm, which is most destructive early in summer—which causes an orchard to appear as "scorched"—and which descends into the earth, undergoes its transformations, and comes out in the perfect insect late in autumn or early in spring, and lays its eggs by first crawling up the tree.

The remedies consist in keeping the insects from ascending the tree. The best is perhaps the following:—Take two pieces of board a foot wide and two feet long; hollow out a space in each, so that when placed together they shall enclose the trunk of the tree. Smear their under surfaces with tar, place them to the tree, and a large nail or two driven through one into the other at each end, secures them to their place. The crevices between the boards and the tree are stuffed with fine grass, wool, or swingling tow. Tar has been applied directly to the bark, but it injures or kills the tree, soon gets crusted in the hot sun, and the caught insects soon form a bridge, over which the rest pass. It is said that a substance much better than tar may be prepared by burning an old india rubber shoe over a dish, into which the melted substance will gradually drop, and form a viscid juice, which will not dry in a year. Perhaps a broad belt of worsted smeared with it, and placed round the tree, would answer the desired purpose. It should be applied by mid-autumn, and remain till the next summer.

In order that our correspondent may determine whether this is the true canker worm, (which possibly may have been conveyed there by some unknown means,) we annex Dr. Harris's description of the caterpillar, or insect in the larva state:—

> A very great difference of color is observable among canker-worms of different ages, and even among those of the same size. It is possible that some of these variations may arise from a difference of species; but it is also true that the same species varies much in color. When very young, they have two minute warts on the top of the last ring; and they are then generally of a blackish or dusky brown color, with a yellowish stripe on each side of the body; there are two whitish bands across the head; and the belly is also whitish. When fully grown, these individuals become ash-colored on the back, and black on the sides, below which the pale yellowish line remains. Some are found of a dull greenish yellow and others of a clay color, with slender interrupted blackish lines on the sides, and small spots of the same color on the back. Some are green, with two white stripes on the back. The head and the feet partake of the general color of the body; the belly is paler. When not eating, they remain stretched out at full length, and resting on their fore and hind legs, beneath the leaves.

Sowing Buckthorn Seed.

Will it do to plant Buckthorn seed in the spring, and will it be necessary to scald them to promote their sprouting the coming summer. FARMER'S BOY. *Platte City, Missouri, Jan.* 10, 1852.

Buckthorn seed should be treated precisely in the same way as apple seed—that is, mixed with sand in autumn as soon as gathered and washed out; exposed to the weather in winter; and planted early in spring as soon as sprouting commences, or before. This we have found uniformly successful. Perhaps exposure to the weather is not essential, as we have tried no other way. Old seed will not grow. We know not the effect of scalding, but would rather not try it.

Burnt Clay.

MESSRS. EDITORS—I would wish to make the inquiry, if you know of pounded brick ever being used as a manure for top-dressing, and what its effects had been. I believe that chemists maintain that burned clay has the power of absorbing ammonia. Perhaps old bricks have been tried in confirmation of this theory. Not wishing to take a "leap in the dark," I would like to obtain some information through your paper. "A SUBSCRIBER." *Petersburg, Va., March* 9, 1852.

Burning clay soils, which has been found sometimes very beneficial, appears to operate, so far as the *clay* is concerned, more in altering its texture, and destroying its tenacity, than in any other way. Pounded brick could be of no use in any way but in affecting the texture of the soil, and would be a costly operation where some hundreds of loads would be required to produce any material influence. There is enough clay in all soils to absorb all the ammonia they usually come in contact with. It will be observed that the heat, in burning soils, operates in several ways, as for example in reducing the vegetable parts to ashes, rendering the lime caustic, &c. It appears never to be of any use except on heavy soils, and is most so on those with a large portion of decayed vegetable matter.

Applying Guano.

You will confer a favor by informing me what quantity of *Peruvian guano* should be applied per acre to Indian corn, and also the most approved method of application. Very respectfully yours, SAML. D. BOWEN. *Coventry, Rhode-Island.*

Two or three hundred pounds to an acre is usually considered enough—perhaps corn, which will bear much manuring, might have 400 lbs. We should, however, prefer not giving so much, and applying at the same time one-half the usual amount, more or less, of common yard-manure, more especially if the ground is not already well supplied with vegetable matter.

The best mode is to mix it thoroughly with several times its bulk of peat, or with soil which contains much mould, and let it remain several days before applying, when it may be treated as rich compost. If from necessity, it must be applied alone, it should be sowed in damp or rainy weather, and well harrowed into the soil. It may be then plowed under to a moderate or slight depth.

Wash for Brick Work.

Will you be so kind as to inform me whether there is any kind of composition that can be put on a brick house in the place of paint, as has been formerly used, a composition that is cheap and durable. Your obedient serv't., HEMAN B. HAMMOND. *Bristol, Ohio, March* 12, 1852.

On *hard, well-burnt* brick, simple lime-whitewash will adhere, become hard, and endure for many years, often quite as well as paint. The quality of the brick has much to do with its permanence. Downing, in his work on Country Houses, gives the following:—" Slack half a bushel of lime in a barrel, by pouring over it hot water enough to cover it four or five inches deep, stirring till slacked—then fill the barrel two-thirds full of water, and add one bushel of water-lime. Dissolve in water and add three pounds of sulphate of zinc. The whole should be of the thickness of paint, ready for use with the brush. This wash is improved by the addition of a peck of white sand stirred in just before using. The color is a pale stone color, nearly white. To make it fawn color, add one pound yellow ochre, two pounds raw umber, and two pounds Indian red. To make it drab, add one pound each of Indian red, umber, and lampblack." This wash the author says he has tested thoroughly, and that it sets and adheres very firmly.

◆

Sowing Timothy---Bone Manure.

Edgar Burroughs, of Loudon Bridge, Va., makes the following inquiries,—1. The best time to sow timothy seed. 2. The quantity per acre, and 3. How many pounds of sulphuric acid will be required to 100 lbs. of bones to reduce them to powder, and what degree of dilution is necessary.

1. If the timothy is sown and lightly covered by mid-autumn, the young plants will get a good foot hold by winter. The oat crop is too thick in growth—wheat is better; but at the north, some farmers have been very successful by sowing grass seed as a separate crop very early in spring. If there is danger of its drying up by the hot sun, a mixture of clover might prevent this result.

2. Many sow only four quarts per acre, and consider this abundant—we prefer a peck, as giving a closer and heavier crop.

3. Fifty pounds of sulphuric acid will usually reduce 100 pounds of bones—perhaps 40 lbs. would do, if of the strongest quality. It should be diluted with about three times its bulk of water, added gradually. The best way is to apply it in separate portions in two or three successive days.

◆

Analysis of Oil Cake and Wheat Bran.

Could you not favor the readers of the Cultivator with the analysis of the different kinds of oil cake, viz: that made from the large seed or Calcutta seed, and that made from the small seed or seeds of *Linum usitatissimum*. Also the analysis of wheat bran. By giving the above information I have no doubt you will oblige many of your readers, particularly inexperienced ones like myself. The cake meal of the small seed is much more mucilaginous and palatable than that of the large or Calcutta seed, but whether it is more nutritious I cannot determine. Yours respectfully. F. B. Poley. *Montgomery Co., Pa.*

We do not know of any analysis of oil cake. The only analysis of bran now at hand, gives the following result, which is not very minute:—

	parts.
Soluble salts	44.15
Earthy phosphates,	46 50
Silica,	50
Metallic oxides,	25

Prof. Norton says, " It is a singular fact, than in all the seeds of wheat, and of other grains, the principal part of the oil lies near, or in the skin, as also does a large portion of the gluten. The bran owes to this much of its nutritive and fattening qualities. Thus, in refining our flour to the utmost possible extent, we diminish somewhat its value for food. The phosphates of the ash also lie to a great degree in the skin."

◆

Destructive Orchard Caterpillar.

N. H. Noyes, of Otisco, N. Y., inquires for a remedy for the destructive caterpillar which stripped orchards of their leaves last summer, so generally, in large portions of Onondaga and Cayuga counties. As this differs from the common orchard caterpillar in having no nests, it cannot be easily destroyed in a wholesale manner, and we do not know of any practicable and effectual remedy. We do not possess any other material information in relation to it than was given in the Cultivator for August last. More than 20 years ago it stripped the forests in some parts of Cayuga county, but soon after disappeared, except in small numbers, until its formidable re-appearance last year.

◆

Information Wanted.

We shall be glad to receive replies to the following inquiries, from some of our readers:—

Clover Machine.—Please let me know in your next, what machine you recommend as being the best for threshing clover. B. D. *Montreal, March* 24.

Feeding Oil Cake.—I would inquire through the pages of the Cultivator, what proportion of oil cake meal Mr. Johnston mixed with corn meal in feeding fattening cattle. J. W. G. *Ball's Pond, Conn.*

Feeding Poultry.—I should like to make an inquiry respecting the best management and feeding domestic fowls, where they are kept expressly for their eggs. Is it best to give them all the grain and other stuff they will eat? Will high feeding make them too much inclined to fatten, rather than lay? I would like to see an article on this point, in your paper. Salmon Cook. *North Springfield, Vt., Feb.* 26, 1852.

Use of Lime.—I have a quantity of air slacked lime, which I wish to apply, at the rate of about 10 bushels to the acre, to corn and potatoes, manured in the hill, on rather light-yellow loam soil. How shall I apply it, to insure the best result to crops this season? The lime has been burned some two years. H. H. Harris. *Moriah, Essex co., N. Y.*

◆

Will you please inform me through the columns of the Cultivator, how many cows a fair sized yearling bull with good keep, will serve without injury to himself or produce. Subscriber. *Swanton, Vt., March* 15.

We have had no experience on this subject, that would enable us to answer this inquiry understandingly. Youatt, however, who is usually regarded as very high authority in such matters, says that a bull should never be used at that age—that " it is absurd and dangerous to begin when a yearling—he will come in season at two years old—he will be better at three." This is all the information he gives on this subject.

Temperance is the best physic.

NEW PUBLICATIONS.

Rural Architecture; being a complete description of Farm Houses, Cottages, and Out-buildings, comprising Wood-houses, Workshops, Tool-houses, Carriage and Wagon-houses, Stables, Smoke and Ash-houses, Ice-houses, Apiary or Bee-house, Poultry Houses, Rabbitry, Dovecote, Piggery, Barns and Sheds for Cattle, &c.; together with Lawns, Pleasure Grounds and Parks; the Flower, Fruit, and Vegetable Garden. Also, Useful and Ornamental Domestic Animals for the Country Resident, &c. &c. &c. By Lewis F. Allen. C. M. Saxton: New-York.

This work is designed to afford suggestions and furnish models to the farmer at every step of progress, from the selection of a site for building, till the dwelling is completed, the out-buildings erected, the grounds laid out, the shrubbery planted, the farm stocked, and the entire fixtures of a homestead are ready for the occupant.

This is a great deal for one man to undertake in the compass of a book of 384 12 mo. pages; but the author has gone through the whole catalogue quite masterly, thinking, talking, recommending and criticising in his own style. He has followed the teachings of no master-builder, adopted no order of architecture, but in a sort of *sui generic* way been guided by a taste, formed by close observation of the prominent wants of the farmer, rather than the study of architectural rules. Most of the designs for farm-houses strike the eye favorably, their expression being rather that of convenience and repose, than of gaudy show or artistic effect. The spirit in which the book is written, is eminently calculated to recommend it to an extensive circulation. It cannot fail to exert a good influence wherever it is read, to improve the taste, and give the farmer and general reader many timely and valuable hints.

History of the United States of America. Written in accordance with the principles of peace. By M. Murray. B. B. Mussey & Co. 441 pages.

This neat volume comprises the history of the country from the discovery of Columbus till the close of the Mexican war. The authoress, a highly esteemed member of the Society of Friends, while evincing strong feelings of patriotism and much attachment to political liberty, has adopted as a leading principle that the value of history depends on its strict impartiality and *truthful coloring*, without regard to national pride or national prejudice; and that the promptings of true patriotism will seek, not the concealment, but cure of national defects. This intention appears to be carried out with much candor as well as ability. However views may differ on the subject of war, we are confident that it will be generally conceded that most of our histories exhibit altogether too much of its glitter, with very little of its real miseries or enormous cost. Believing, as we always have done, that agriculture and rural improvement are especially the great arts of peace, and can never flourish in the midst of the storms of war, we cannot but hail with pleasure this attempt to promote in the rising generation the feelings of the superior patriotism of peace and justice.

Harpers' New Monthly Magazine. Harper & Brothers: New-York.

This publication has met with a reception altogether unprecedented. The publishers have recently purchased "The International," and if the union of the two combine the talent and excellencies of both, we shall have a periodical, American in its character, elevating in its influence, and above competition. The series of articles, by Rev. J. S. C. Abbott, on Napoleon, are alone worth the subscription price. "The Bleak House," the first chapters of which are in the April number, promises to equal the best of Dickens' popular works. As a social reformer, Dickens holds the first rank—no abuse of power is too kingly to escape rebuke, and no public wrong sufficiently legalised to pass review unnoticed.

Pictorial Field Book of the Revolution. By B. J. Lossing Harper & Brothers: New-York.

The twenty-first number of this work fully sustains the previous encomiums, we have expressed. The cursory reader of history, will be instructed by it, and the antiquarian delighted with the treasures it brings to light.

Horses—their varieties, breeding, and management in health and disease.

Domestic Fowl and Ornamental Poultry.

The Hive and The Honey Bee, with an account of the diseases of Bees, and their remedies.

The Hog, its origin and varieties, and treatment under disease. C M. Saxton, New-York.

The above are the titles of a series of hand-books, which contain, in a cheap and convenient form, much that is desirable for every farmer. Their author, H. D. Richardson, is extensively known in England, as a reliable and popular writer, and their contents will repay a careful perusal—besides twenty-five cents will buy either of them.

The American Rose Culturist. C. M. Saxton: New-York.

This book gives a full catalogue of the different species and varieties of the Rose; the most approved methods of cultivation, propagation, pruning, &c., together with directions for the treatment of the Dahlia. It is a seasonable issue, and no one need say, in defence of his vacant lawn, that he is ignorant of how to cultivate the Rose. Price 25 cents.

A Practical Tteatise on Manures. E. S. Jones & Co., Philadelphia.

This reprint from a publication of the British Society for the Diffusion of Useful Knowledge, comprises a treatise on the nature and properties of Vegetable, Animal, and Mineral Manures; modes of preparation and application, and their effect. Though the result of experiments on a foreign soil, and more particularly adapted to English climate, much that is useful may be found in its pages.

Plantation and Farm Instruction, Regulation, Record, Inventory and Account Book. J. W. Randolph, Richmond, Va.

A Southern Planter has reduced to a complete system, the entire business of a Plantation, and publishes it as a guide to others. The minuteness with which the detail of all the operations on a plantation is treated, is a model for farmers. Why should not some northern farmer do the same for the benefit of the agricultural community?

Graham's Magazine. Geo. R. Graham: Philadelphia.

The Editor seems to understand to perfection, the art of combining the pleasing and instructive, the beautiful and the true. Its illustrations are finely executed, and its contents original.

NOTES FOR THE MONTH.

Award of Premiums.

It appears by our books, that the following gentlemen are entitled to the Premiums for the largest lists of subscribers furnished for The Cultivator for 1852, prior to 10th of April:

1. J. P. Mills, Galesville, N. Y.,	185 subs.	$50
2. A. Cary, Fort Plain, N. Y.,	161	40
3. Hiram Mills, Lowville,	134	35
4. H. & J. Brewer, Springfield, Mass.,	126	30
5. James Wells, Johnstown, N. Y.,	100	25
6. L. W. Curtis, Madison, N. Y.,	90	17,50
7. P. Stedman, Chickopee, Mass.,	90	17,50
8. F. R. Williams, Havre de Grace, Md.,	78	10
9. A. S. Thurber, Rouse's Point, N. Y.,	59	5

The above prizes will be paid in cash on being called for.

To all others, who have sent us thirty or more subscribers, The Horticulturist, will be sent for the year 1852.

To all who have sent us fifteen, and under thirty, The Hotticulturist will be sent for six months.

☞ We have entered and sent the Horticulturist, so far as we know, to all who are entitled to it; but as it is possible that some mistakes may have occurred, we will thank any agent who may be entitled to receive the Horticulturist, to give us immediate notice if he has failed to receive the numbers from January.

Acknowledgments.—Communications have come to hand, since our last, from A Plowman, D. Lackland, L. Durand, A. D. C., Subscriber, W. G. Edmundson, S. Clarke, Jr., J L. Pope, P., L. W. Martin, Chester County, David Tomlinson, Platanus, C. H. Cleaveland, F. M. R., Sanford Howard, A Subscriber.

Books, Pamphlets, &c., have been received as follows: Dr. Brinkle's Remarks on Entomology, before the Penn. Ag. Convention.——Package of Seeds, from Hon. T. Ewbank, Com. of Patents.——A Treatise on the Potato, with an Essay to show the Cause of the Disease, and to suggest its Remedy, by Wm. J. A. Bradford.—"Deer Peas," from Mr. L. S. W. Folsom, Choctaw Nation — For list of books received, see Notices of "New-Publications."

☞ The continuation of F. M. R.'s "Notes of a Tour in France," came too late for this month, as did also several other communications intended for this number.

"A Subscriber," at Princeton, Illinois, will find his inquiry about mowing machines, answered in our last number, p. 130.

☞ Some one at Greenfield Center, has requested us to inform him by mail, where he could purchase Bremen Geese and Aylesbury Ducks, but as he has omitted to give us his name, we could not write to him; and would say here, that we do not know where either can be procured.

☞ In answer to several inquiries about Poultry, we would state that we know of none of the fancy varieties to be had any where in this vicinity.

Dairy-fed Pork.—An impression prevails, more or less, in this country, that pork from swine fed on whey or skimmed milk, is not as good as that fed wholly on Indian corn. It is probably true that a mixture of food produces the best quality of flesh; but to suppose that the waste of the dairy has a tendency to injure the quality of the pork, is evidently erroneous. Richardson, in his late treatise on the hog, observes,—"The Wiltshire bacon is of peculiarly delicious quality; but the cause is obvious, and is not to be referred to any of the details of the curing process. This bacon is prepared from *dairy-fed* pork. This is the true secret."

Public Sales of Improved Cattle.—Our readers will notice by advertisements in this paper, that two large public sales of improved stock are to be held in this State, the coming summer—the first, that of L. G. Morris, Esq., to take place at his farm at Mount Fordham, near New-York city, on the ninth of June, consisting of Short-horn, Devon, and Ayrshire cattle; South-Down sheep, and Suffolk and Essex pigs. It is a gratifying evidence of the increasing demand for pure bred stock, that Mr. Morris' previous sales have been such as to induce him to continue his importations and annual public sales.

Mr. Allen's Sale, it will be seen, is to take place near this city in August next, and will be one of the largest yet held in the State; and at a season of the year when our southern and western friends are usually more or less in this section of the country, the attendance will probably be large. From the long experience which Mr. Allen has had as a breeder, and in the excellent material which he has from time to time ingrafted into his herd, we think the most fastidious judges of fine stock, cannot but find something among his numerous animals which will gratify their choice. To such as wish to obtain good milking cows, as well as choice blooded animals, the opportunity for good selections will be a rare one. There is no one appendage to the comfort of housekeeping, more difficult to obtain, than well-bred, good-looking, deep-milking cows; and our people are beginning to find out that it is quite as easy to keep a *good* cow as a poor one, and infinitely more agreeable to the sight to have a fine, well developed creature about them, than a poor unhappy looking thing, yielding little profit in her milk, and no pleasure in her sight.

French Merino Sheep.—We give in this paper, portraits of several of the French Merinoes, imported by Mr. Jewett of Vermont, last year, and now owned by him and Messrs. Morse and Holabird. These sheep have been so favorably received, that Mr. Jewett has, as we are informed, again sailed for France, to procure another lot.

Live and Dead Weight of Hogs.—Samuel Linn, of Ohio, states in the Patent Office Report, that he thinks one-sixth, (instead of one-fifth, the common rule,) is about the true estimate of the difference between live and dead weight. A hog weighing alive 242 lbs., weighed when dressed, 202 lbs., a loss of one-sixth. Doubtless the breed would affect the result; a big-headed, heavy-legged race, might give a different result from those specimens of neatness, the Suffolks and Berkshires.

Habit of varieties of Potatoes in withstanding the Rot.—It has always been known that certain varieties of potatoes were more inclined than others to be affected by rot. The Carters, and the Mercers, or Neshannocks, have generally perished badly. A striking comparison of the different habits of varieties in this respect, was shown to the writer by Wm. S. King, Esq., Manton, R. I. He planted a piece of ground, last year, to the Mercer, and a round blue potato, in alternate rows. At the time they were dug, the blue potatoes were entirely sound, but the Mercers were so much affected with rot, that nearly the whole of them were left on the field.

Osage Orange Hedges.—Countless miles of hedges of this plant are set out in the state of Illinois, and as D. F. Kinney remarks in the Prairie Farmer, "they will have either a great deal of good fence, or a vast amount of worthless brush, in a few years"—doubtless the former, if unsparing pruning is given. "I was told there were some hedges in the vicinity of Galesburg, only two years old, that were considered sufficiently strong to resist all attempts of animals to get through them." This was in a very fertile soil, where trees outgrew those at the east, two or three to one. The Overmans, nurserymen, in Fulton county, in that state, we are informed have two million Osage Orange plants for sale—a strong expression of their confidence in its usefulness.

Saving Manure.—The Michigan Farmer gives the practice of a Scotch farmer, in the saving and management of his manure, which we cannot but regard as eminently economical of its fertilizing qualities, and worthy of general adoption except in the depth of winter, when it may be delayed. To prevent dissipation by evaporating and washing, he draws it away as fast as it is thrown from the stable, piles it up in some convenient place on the farm, first placing a layer of the fresh manure, to a depth of 8 or 10 inches, then a layer of common soil about four inches thick, which presses the course down to about the same thickness, then another layer of manure, which in like manner is followed by another layer of earth, and so on till the pile is completed. In this way the volatile portions are preserved, and he asserts the manure is of double value to what it would have been lying in the yard.

Remedy for Curculio.—Thomas W. Ludlow, Jr., states in the Horticulturist, that he has effectually repelled the curculio by syringing the trees with whitewash made of unslacked lime, with a small portion of flour sulphur mixed through it, that is, "a handful or two" of sulphur to a "pailful" of whitewash. Twenty plum trees had blossomed for six years without fruit; two were syringed the present year, and the result is, one is so loaded as to need propping. [Quere—what about the other tree? We are not informed—the best to be said at present of this remedy, is, that it is worthy of further trial.]

Fattening properties of Peas and Beans.—These articles have been found by chemical analysis, rich in nitrogen. The inference has been that they would be specially useful in supporting the waste of the muscles of animals, and it has been suggested that they would be particularly useful in the production of wool. They are, evidently, valuable for these purposes, but not the less valuable for the production of fat. Those persons who have used peas for fattening hogs, consider them worth as much as Indian corn. In districts where that grain is not readily grown, very fine pork is produced from peas. Dickson, in his work "On the breeding of Live Stock," states that a sweepstakes was entered into between five East Lothian farmers, to be claimed by the one who should be pronounced the best feeder of cattle. Forty cattle of the same breed, and in equal condition were divided between them, as fairly as possible. They were put up together the second week in September, and killed at Christmas following. The winner of the stakes fed his animals wholly on *boiled beans*, with hay.

Reclaiming Swamps.—The Editor of the Michigan Farmer says, that the application of 25 loads of clay per acre, to drained swamp, produced a wonderful effect in fitting it for wheat, in an experiment he witnessed in England. Clayed and unclayed, were both treated with guano; but while the clayed portion was as high as his head, stood thick, with long heads, the other presented only the appearance of ordinary wheat.

Trees and Shrubs.—One of the most perfect specimens of thorough gardening, both as relates to fruit and ornamental trees, is furnished by the grounds of H. W. Sargent, near Fishkill, N. Y. After trying the English Evergreen shrubs, he found them poorly adapted to this climate, such as hollies, laurels, laurustinus, &c., and rejected them. But he has succeeded quite satisfactorily with the following, viz: *Magnolias*—conspicua, soulangiana, tripetela, purpurea, glacilis, glauca, longifolia, and macrophylla; and the following *pines*—cembra, excelsa, pinaster, pumilis, Lambertiana, Gerondiana, austriacus, maretta, and maratina.

Strong Horses.—The Editor of the Michigan Farmer states that he saw cart-horses in Liverpool, England, much smaller than the London cart-horse, but apparently not inferior to them in strength, (and which he thinks are of the Clydesdale breed,) which were "hauling" cotton and guano, load after load, up hill and down, with five or six tons to a load, two horses being attached to each.

The Farmer at Home, is the title of a new work now in press, by Rev. Dr. Blake, author of the "Farmer's Every Day Book," and many other valuable works. It is intended as a cyclopedia of the more important topics of modern agriculture, and in natural history and domestic economy. C. M. Saxton, publisher, New-York.

STOVES.

THE subscribers are prepared to furnish dealers with a full assortment of PARLOR and COOKING STOVES for coal and wood, on liberal terms.

Circulars giving particulars can be had on application.

JAGGER, TREADWELL & PERRY,
Eagle Foundry, No. 110 Beaver st., Albany, N. Y.
May 1, 1852—6t.

FOR SALE,

A THOROUGH bred, 4 year old, DURHAM BULL. Pedigree: Sire, Symmetry, American Herd Book, p. 131, (166.) Dam, Gipsey, American Herd Book, p. 181. This Bull won the first prize in his class at the State Fair at Syracuse. W. FULLER.

Skaneateles, May 1, 1852—1t.

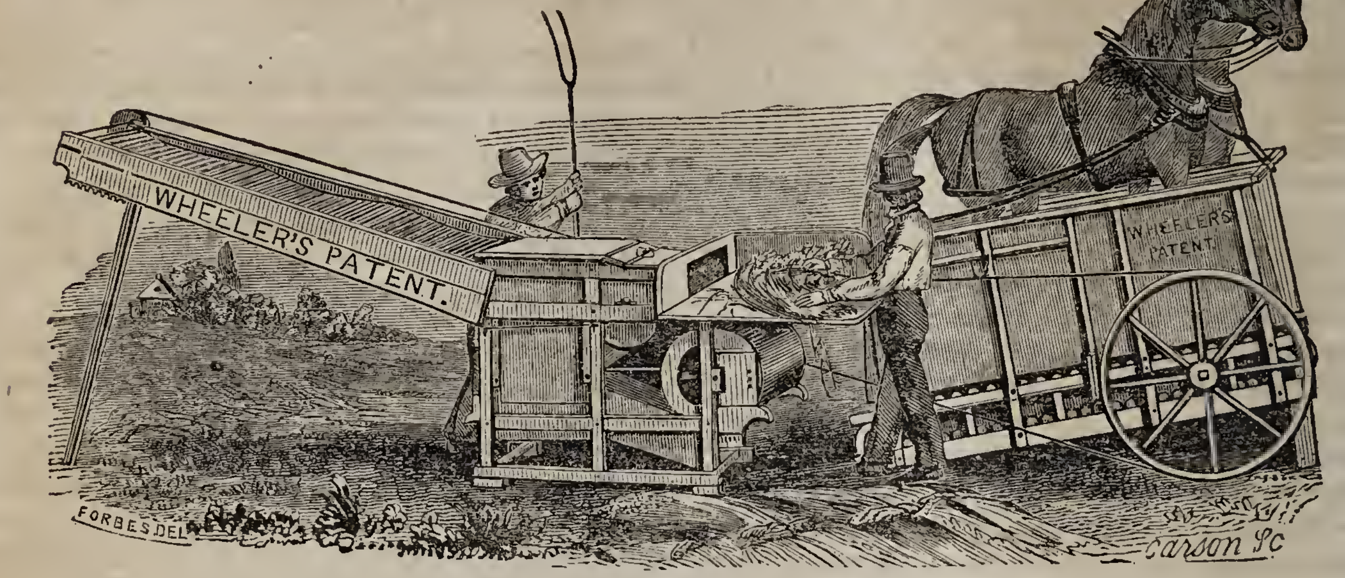
Morgan Horse, Young Black Hawk.

THIS splendid colt will stand at the stable of Irvin D. Remington, in Sennett, Cayuga county, one mile northeast of Throopsville. Season ending in August.

Young Black Hawk is a jet black colt, of good size, and one of the best proportioned and elegant moving colts that can be produced. He was four years old in September, 1851, and took the third premium at our State Fair last fall, held at Rochester, and has taken the first premium at our county fair also. He was sired by old Black Hawk, kept by D. E. Hill, of Bridport, Vermont. His dam was a Messenger, got by old Mambrina—grandam by Plato—he by old Messenger—great grandam by imported Messenger. He comes the nearest to his sire for form and action, of any of his colts, having the old horse's head and neck perfectly.

He will stand for a limited number of mares, at my stable during the week, with the exception of Saturdays, through the season; all are invited to call and see him. Terms, $10 to insure with foal, $8 for the season, $5 for a single leap. Good keeping provided at the risk of the owners.

IRVIN D. REMINGTON,
Sennet, Cayuga county, N. Y.
May 1—2t.*



New-York State Agricultural Works, Albany. N. Y.,

BY WHEELER, MELICK & Co.

THE subscribers offer this season a new and most valuable machine in the successful combination of a *Winnower* with their Overshot Thresher. It is easily driven by one Double Horse Power, and has been now fairly tested, a large number having been in constant use during the past Threshing season.

We have numerous letters from gentlemen who have used the Winnower, and gave extracts from a few of them in our advertisements of last month, and we now insert a few more. We might add a large number, but it is deemed unnecessary.

[*From R. Olney, of Portage, N. Y.*]

" *Messrs. Wheeler, Melick & Co.*—I will now state some facts in regard to your Thresher and Winnower. We first used it to thresh Oats, which were good, and not very long straw. With 5 hands we threshed and cleaned, fit for any market, 60 bushels per hour, while running. This is not guess work as is frequently the case, but we kept the time to the minutes, and much larger figures might have been made had we exerted ourselves. Our Wheat *was heavy growth and very long straw.* We averaged 20 to 25 bushels an hour, using a pair of mules, and a span of very light horses, alternately, but with either team alone, and 5 hands, I can thresh 400 bushels good Oats a day, and half that quantity of Wheat, and make it no harder for team or hands, than ordinary farm work. The machine is admirably adapted to the farmer's use; can be worked at so little expense, and in bad weather, when little else can be done. It is of the most simple and durable construction, their being nothing liable to break or soon wear out, but that a common farmer can repair. It cleans the grain well, and wastes less than any other I ever examined. I write thus minutely, that you may understand the facts as they are; the figures I have given being taken from our ordinary threshing, without any effort to hurry business."

[*From S. H. Olney, of Granger, N. Y.*]

" *Messrs. Wheeler, Melick & Co.*—I have used your Patent Horse Power and Winnower while it threshed about 3,000 bushels of grain, and am happy to say it has given the best satisfaction. With a light pair of horses and 5 hands, we have threshed from 50 to 60 bushels of Oats per hour, and about half as much Wheat. My ordinary day's work of Oats is from 250 to 300 bushels, and 125 to 150 of Wheat. I can confidently recommend this machine to farmers, as superior to any I have used, although I have used various kinds for about 15 years."

[*From Chester Olney, dated March* 1, 1852.]

" *Messrs. Wheeler, Melick & Co*—Last fall I employed Mr. Olney, with one of your Powers and Winnowers, to do my threshing, and I most cheerfully state that the work was done better, with a less number of hands, and less waste, than ever before, with other machines. It averaged from 20 to 30 bushels per hour of Wheat, and twice as much of Oats."

[*From N. Olney, Esq, of Portage, N. Y.*]

" *Messrs. Wheeler, Melick & Co.*—You ask my opinion in regard to your Thresher and Winnower, but as two of my sons, and one of my neighbors, have given you some details, I will merely say that in my opinion your machine will do better work than any I have ever used, although I have used many different kinds for the last 20 years."

[*From a second letter of E. French, Esq., Bridgeport, N. Y.—Dated March* 9, 1852]

" *Messrs. Wheeler, Melick & Co.*—I am not able to do your Winnower the justice it deserves. I have used it since August, and it has earned $500 without asking for work, while other machines have been begging for it. I have had a man running it who has an eight Horse Machine of his own, and good of its kind, but he could not get work with it. I have taken pains to exhibit the operation of your machine, and have seen none but pronounce it the most perfect in use. It has threshed 25 bushels per hour, and is capable of threshing 200 bushels per day, of good Wheat. My Wheat was of the "Soles" variety. I sold it from the Machine for seed, without other cleaning. Oats it will clean better than any Fanning Mill I ever used."

[*From E. T. Tiffany, of Dimock, Pa.*]

" *Messrs. Wheeler, Melick & Co*—I consider your combined Thresher and Winnower, one of the best machines ever introduced into Northern Pennsylvania. I have used one of them through December and a part of January, and did more business than any other 4 machines in this place. With a good team, I can thresh 400 bushels of Oats per day, and I think with an exchange I could thresh 500 or 600 and with less waste and expense than any other machine in existence. Could I get experienced workmen, I would order one or two more. It would be the best investment I could make. I can make better profit with one of your machines, than can be obtained from any two farms in Susquehanna Co. Your Thresher and Winnower receives the highest approbation of our farmers."

[*From Samuel Tucker, of North Evans, N. Y.*]

" *Messrs. Wheeler, Melick & Co.*—In reply to your request about the Thresher and Winnower, I am ready to answer that it works well. Indeed its equal was never seen in Erie Co. I have threshed 18,794 bushels of Wheat, Oats, and Barley, besides 50 Bushels of Grass Seed. A number of my neighbors want machines like mine."

☞ Price of Double Power Thresher and Winnower, $225.

The superiority of WHEELER'S PATENT RAILWAY CHAIN HORSE POWER, and OVERSHOT THRESHER and SEPARATOR, is universally acknowledged. Thousands of them are in use, many of which have threshed from 50,000 to 100,000 bushels of grain, and are still in good condition. Probably more than four times as many of these machines were sold during last year, as of any other kind. They are beyond doubt the most durable and economical machine in use. Their capacity has been tested by repeated trials, as well at the New-York and Pennsylvania Fairs, as on several private occasions, in competition with another machine made in this city, which has been advertised to be far superior to ours, and in every instance the result has been about *one third*, and in some instances more, in favor of our machines. In every case except one, where we have submitted our machine to a *working* test at Fairs, it has taken the highest premiums, and in that excepted case, the Committee decided that our machine performed its work in 8 minutes, and its competitor in $11\frac{3}{4}$ minutes, being nearly one third in favor of ours.

We have also exhibited ours, in competition with the same machine, at the State Fairs in Ohio, Michigan, and Pennsylvania, and also at the Provincial Fair in Upper Canada, at all of which we received the highest Premiums, viz: In Ohio a Silver Medal and Diploma; in Michigan $20; in Pennsylvania $10; and in Canada a Diploma.

We have numerous similar testimonials from County Societies, where we have always received the highest premiums awarded to Chain Powers.

Price of one Horse Power, Thresher, Separator and Belting,..	$120
Two Horse, do,..	145

Besides the above, we manufacture and keep constantly on hand, among other articles, Clover Hullers, Straw and Stalk Cutters, Portable Saw Mills, (adapted to Horse Powers,) and Single Powers, with Churn Geer attached. These last are extensively used in large Dairies, and are so arranged that the Power is used at pleasure for either threshing, churning, wood-sawing, or other purposes.

☞ All machines made and sold by us, are *warranted to give satisfaction*, or they may be returned, after a reasonable time for trial. Orders are solicited, and will be promptly filled.

WHEELER, MELICK & CO.
Corners of Hamilton, Liberty & Pruyn Streets,
(Near the Steamboat Landing,) Albany, N. Y.
May 1, 1852.

N. YORK AGRICULTURAL WAREHOUSE.

A. B. ALLEN & CO.,

189 *and* 191 *Water Street, New-York.*

PLOWS of a great variety of patterns and different sizes, calculated for sward and stubble land, wet meadows, and recently drained swamps where roots abound. Among these plows, also are the deep-breaking-up, flat-furrow, lap-furrow, self-sharpening, side-hill, double-mould-board, corn, cotton, cane, rice, and subsoil with single or double wings.

HARROWS, triangular, square, Geddes, and Scotch.

ROLLERS, with iron sections one foot long, and of different diameters. These can be arranged on an iron shaft for any required width.

CULTIVATORS of upwards of twenty different kinds, steel tooth and cast iron.

SEED SOWERS of six different kinds and prices.

HORSE POWERS, endless chain and circular, of wood and cast iron.

THRESHERS, with or without Separators.

GRAIN MILLS of cast iron, and burr stone, to work either by hand, horse or water power.

CORN SHELLERS, single and double, large and small cylindrical to work by hand or otherwise.

STRAW CUTTERS, spiral, straight, or circular knives.

VEGETABLE CUTTERS for turneps and other roots.

Together with a great variety of all other Agricultural and Horticultural Implements kept in the United States, such as Hoes, Shovels, Spades, Rakes, Manure and Hay Forks, Grain Cradles, Scythes, Snaths, &c. &c.

CASTINGS of all kinds for Plows, Cotton Gins, and Sugar Rollers.

WAGONS and *CARTS*, for horse, ox, or hand.

STEAM ENGINES for farm and other purposes.

Our implements occupy three large stores, and we believe they make up the largest and most complete assortment in America. In addition, we have a machine shop employing upwards of one hundred men, where any articles in our line can be made to order.

A. B. ALLEN & CO.,
Jan. 1, 1852—tf. 189 and 191 Water st., New-York.

Emery's Seed Planter,

WARRANTED the best for sowing all kinds of seeds, whether by their gravity, or by forcing with brush. And any desired amount of seed, from half a pound of Turnep, Carrot, or Beets, to four bushels of Corn, Peas, or Beans, per acre—and in continuous drills or hills, any distance apart, from three inches to eight feet; and equally well adapted for hand use or for horses. Over one thousand of them have been put in use during the past four years, without an instance being known of failure to give satisfaction. We have just completed four hundred for this spring sales, and all orders should be sent in early, to insure being filled in time, as no more will be made. Price, $14.

Field and Garden Seeds.

The subscribers are receiving, and have on hand, a choice lot of Field Seeds, composed in part of

Black Sea Spring Wheat, both red and white chaff.
Italian and Hedge Row Spring Wheat.
Spring Rye and Barley.
Black Tartarian and Poland Oats, very superior for weight and quality.
Broom Corn Seed, superior quality.
Clover, large, small, and white Dutch.
Red Top, northern and southern.
Timothy and Orchard Grass.
Flax and Hemp seeds.
Tobacco Seed, Broad and Long leaf.
Peas—a choice assortment of Garden Peas.
Field and Garden Peas.

Also a choice assortment of fresh GARDEN SEEDS, warranted true to their name. The attention of Gardeners is particularly called to the assortment. For sale by

Albany, April 1, 1852. EMERY & CO.

Improved Stock.

CATTLE, of the Durham, Devon, Hereford, Alderney, and Ayrshire breeds.

SHEEP, of the Native and French Merino, Saxony, South-Down, and Cotswold.

PIGS of the Lincoln, Suffolk, and Berkshire breeds.

From our long experience as breeders and dealers in the above kinds of stock, and our excellent situation for purchasing and shipping, we think we can do as good justice to orders, as any other house in the United States.

A B. ALLEN & CO,
Jan. 1, 1852—tf. 189 and 191 Water st., New-York.

Albany Tile Works.

Corner Patroon and Knox Streets, Albany.

THE subscriber will furnish to Agriculturists, of the most approved patterns, Drain Tile suitable for land drainage, of a superior quality, over one foot in length, 3 to 4½ inches calibre, from $12 to $18 per 1000 pieces. They are formed to admit the water at every joint, draining land from 12 to 20 feet each side of the drain, being the cheapest and most durable article used.

Tile sufficiently large for drains around dwellings, at $1 and $8per 100 pieces, being cheaper and more durable than brick drains.

The great importance of thorough drainage is daily becoming more apparent. Orders from a distance will receive prompt attention.

March 1—6t A. S. BABCOCK, Albany.

Field and Garden Seeds.

WE have recently imported, from England, France, and Germany, and have grown in the United States expressly for us, a fine assortment of the best and most approved kinds of FIELD and GARDEN SEEDS.

Agricultural and Horticultural Implements, a large assortment of the various kinds suitable for North and South America.

A. B. ALLEN & CO.,
Jan. 1, 1852—tf. 189 and 191 Water-st., New-York.

Stowell's Evergreen Corn.

WE have a small quantity of this valuable corn, raised by Prof. J. J. Mapes,—price $1.50 per quart.

LONGETT & GRIFFING,
April 1—2t. No. 25 Cliff street, New-York.

Evergreen and Deciduous Forest Trees,

FURNISHED to order, at short notice, by WM. MANN, Bangor, Maine—among which are,

American Arborvitæ.
Double and single Spruce.
Double and Silver Fir.
White Drooping Hemlock.
Hackmetache or Larch.
White and Norway Pine.
High Cranberry.
Moosewood.
White and Yellow Birch.
Sugar and White Maple.
Black Walnut.
Red Ash.
American Mountain Ash.
White and Red Beech.
American White Elm.
Balm of Gilead, &c. &c.

The subscriber having been for many years engaged in raising Fruit and Ornamental Trees, and especially in executing orders for the above named Forest Trees—is prepared to furnish superior trees of all sizes, from seedlings, to as large as can be safely taken up and transported.

Nurserymen who intend to replenish, and others about to ornament cemetery lots, lawns, avenues, &c., enhance their interests by buying of "first hands." The amount of business that I do, and the facilities that I have, enables me to carry out my motto, "as good as the best, and cheapest." Prices for specified kinds, quantities and sizes, furnished per mail, postage pre-paid. WM. MANN.

Bangor, Maine, April 1, 1852—2t.

Albany Drain Tile Works.

No 60 Lancaster Street—West of Medical College, Albany.

THE subscriber has now on hand, Draining Tile of the following descriptions. Prices reduced.

HORSE SHOE TILE.

5½ inch Rise, or 4½ inch Calibre,..........	$18 00 pr. 1000.
4½ " " 3½ "	15 00 "
3½ " " 2¾ "	12 00 "

SOLE TILE.

4½ inch Rise, or 3½ inch Calibre,...........	$18 00 pr. 1000.
3½ " " 2¾ "	12 00 "

These Tile are over one foot in length, and are so formed as to admit water at every joint, draining land from 12 to 20 feet each side of the drain—being the cheapest and most durable article used.

Tile sufficiently large for drains around dwellings, at $4 and $8 pr. 100 pieces. Orders from a distance will receive prompt attention.

Albany, April 1, 1852—tf. JOHN GOTT.

Valuable New Work for Farmers.

THIS day is published, by G. P. PUTNAM, New-York, WALKS AND TALKS OF AN AMERICAN FARMER IN ENGLAND. With Illustrations. Forming volume three of Putnam's Semi-Monthly Library. Price 25 cents.

A narrative of an American Farmer, who has incorporated with an interesting account of personal adventure and description of rural life in England, much valuable agricultural information, with a careful analysis of those peculiarities of climate and social condition which affect the practicability of introducing recent English improvements into the United States.

Extract from the Author's Preface.

"I have most desired to bring before my brother farmers and their families, such things that I saw in England as have conveyed practical agricultural information, or useful suggestions to myself; and such evidences of simply refined tastes, good feelings, and enlarged christian sentiments among our English brethren, as all should enjoy to read of."

Recently Published—Putnam's Semi-Monthly Library, of Standard and attractive Works, for Travellers and the Fireside.

The First Volume—HOME AND SOCIAL PHILOSOPHY From Household Words, by Charles Dickens.

The Second Volume—WHIMSICALITIES: by Thomas Hood.

"Useful and economical volumes for the million."—[*Boston Gaz.*

"Admirably adapted to alleviate the tedium of a journey, or to amuse a vacant hour at home."—[*Boston Traveller.*

"The plan is a good one, and will, beyond doubt, prove in the highest degree successful."—[*Troy Whig.*

"It cannot be too highly commended. It is adapted to readers of various tastes and ages."—[*Mirror.*

"Books which bear the wear of half a dozen readings, and then be worthy of good binding and a place upon the shelves."—[*Cour. & Enquirer.* New-York, April 1—2t.

Colman's European Agriculture.

EUROPEAN AGRICULTURE, from personal observation, by Henry Colman, of Massachusetts. Two large octavo vols. Price, when neatly bound, the same as published in Nos., $5. For sale at the office of THE CULTIVATOR.

Lewis G. Morris's Third Annual Sale,

BY AUCTION, OF

IMPROVED BREEDS OF DOMESTC ANIMALS,

WILL take place at MOUNT FORDHAM, Westchester Co., (11 miles from City Hall, New-York,) on WEDNESDAY, JUNE 9, 1852. James M. Miller, Auctioneer.

Application need not be made at private sale, as I decline in all cases, so as to make it an object for persons at a distance to attend. Sale positive to the highest bidder, without reserve.

Numbering about fifty head of Horned Stock, including a variety of ages and sex, consisting of *Pure Bred Short-Horns, Devons, and Ayrshires, South Down Buck Lambs*, and a very few *Ewes; Suffolk and Essex Swine.* Catalogues, with full Pedigrees, &c , &c., will be ready for delivery on the first of May—to be obtained from the subscriber, or at the offices of any of the principal Agricultural Journals or Stores in the Union. This sale will offer the best opportunity to obtain very fine animals I have ever given, as I shall reduce my herd lower than ever before, contemplating a trip to Europe to be absent a year, and shall not have another sale until 1854.

It will be seen by reference to the proceedings of our State Agricultural Society, that I was the most successful exhibitor of Domestic Animals at the late State Fair.

I will also offer a new feature to American Breeders—one which works well in Europe; that is, *letting* the *services* of *male animals;* and will solicit propositions from such as see fit to try it. Conditions.—The animal hired will be at the risk of the owner, unless by some positive neglect or carelessness of the hirer; the expense of transportation to and from, to be borne jointly; the term of letting to be one year or less, as parties agree; price to be adjusted by parties —to be paid in advance, when the Bull is taken away; circumstances would vary the price; animal to be kept in accordance with instructions of owner, before taking him away.

I offer on the foregoing conditions, three celebrated prize Bulls—"Major," a Devon, nine years old; "Lamartine," Short-horn, four years old; Lord Eryholme," Short-horn, three years old. Pedigrees will be given in Catalogues.

At the time of my sale, (and I would not part with them before) I shall have secured two or three yearly setts of their progeny; and as I shall send out in August next, a new importation of male animals, I shall not want the services of either of these next year. I would not sell them, as I wish to keep control of their propagating qualities hereafter.

I also have one imported Buck, the prize winner at Rochester last fall, imported direct from the celebrated Jonas Webb; and also five yearling Bucks, winners also, bred by me, from Bucks and Ewes imported direct from the above celebrated breeder; they will be let on the same conditions as the Bulls, excepting that I will keep them until the party hiring wishes them, and they must be returned to me on or about Christmas day. By this plan, the party hiring gets rid of the risk and trouble of keeping a Buck the year round. All communications by mail must be prepaid, and I will prepay the answers.

Mount Fordham, April, 1852—3t. L. G. MORRIS.

FOWLS AND EGGS.

THE great desire manifested in New-England for procuring good Poultry, has induced H. B. COFFIN, *Newton, Mass.*, to pay particular attention to breeding and importing first rate stock. All persons desirous of having the purest and best to breed from, may depend upon being faithfully served. Among many kinds of Fowls for sale by him, are the following, which he is very particular in breeding.

Shanghae—Forbes stock.
Imperial Chinese—Marsh stock.
Chittagongs.
Royal Cochin China.
Black Shanghae.
Burmah Pootras.
White Shanghais.

Dealers in Fowls or Eggs for hatching, supplied upon liberal terms. Orders addressed to *No. 40 State Street, Boston*, will be promptly executed.

Reference to Mr. J. Van Dusen, of Cincinnati, Ohio, who wil take orders for Fowls, as advertised above.

Boston, Aug. 1, 1851—12t.

TO FARMERS.---POUDRETTE.

THE LODI MANUFACTURING COMPANY having enlarged their works, are prepared now to receive and fill orders for Poudrette with dispatch, and in all cases with a *freshly manufactured article*, at their usual prices, $1,50 per barrel for any quantity over six barrels. 3 barrels for $5.—$2 for a single barrel, delivered free of cartage on board of vessel or elsewhere, in the city of New-York.

The Company refer to their pamphlet (furnished gratis) for hundreds of certificates as to the efficacy, cheapness, and superiority in all respects of their Poudrette over any other known manure for raising a crop of corn—also to A. J. Downing, Esq., B. M. Watson, Esq., Hon. J. P. Cushing, J. M. Thorburn & Co., and many others as to excellency as a manure for flowers and trees, and the following from Hon. Daniel Webster, Secretary of State:

Washington, March 19, 1850.

"If I neglect the annual purchase of some of this article, my gardener is sure to remind me of it. He thinks it almost indispensable, within his garden fence; but there are uses, outside the garden, for which it is highly valuable, and cheaper, I think, than any other manure at your prices. A principal one, is the enrichment of lawns and pleasure grounds, in grass, where the object is to produce a fresh and vigorous growth in the Spring. Our practice is to apply it, when we go to town in the Autumn, and we have never failed to see its effects in the Spring."

All communications addressed to the "LODI MANUFACTURING COMPANY, 74 Cortlandt street, New-York," will meet with prompt attention. Jan. 1, 1852—6t.

I. T. GRANT & CO.'S

Agricultural Warehouse and Manufactory,

Junction, Rensselaer co., N. Y.

THEY have received the greatest number of Premiums that have ever been awarded to any Fan Mills and Cradles in the United States. Eight first premiums of Silver Medals at the great Fair of the State of New-York. Four silver medals at the great Fair of the American Institute, New-York. Also, Premiums at the Pennsylvania State Fair, Maryland State Fair, Michigan State Fair, and Ohio State Fair. Seven first Premiums at the Rensselaer County Fair, and twenty-five at other county Fairs. They have always taken first Premiums, and stand before the Public pre-eminent.

This is the Oldest Establishment known to the subscribers in this country. Believing that we have kept up to the day of improvements, that Farmers and Planters can rely upon getting the best when they purchase

GRANT'S PATENT FAN MILLS AND CRADLES

of us, at the lowest price, (and warranted) that we hope still, as heretofore, to receive a liberal share of their patronage.

Also, a general assortment of the most approved kinds of Agricultural Implements, in all their variety, such as Straw Cutters, Churns, Corn Shellers, Ox Yokes, Eddy & Co.'s Wrought Iron Beam Plow; Horse Hay Rakes, and all kinds of Harvesting and Haying Tools.

At Junction P. O., 8 miles north of Troy, N. Y., on the Troy and Boston Railroad. I. T. GRANT.

April 1—2t. D. H. VIAL.

Great Sale of Short-horn Cattle in 1852.

THE subscriber, contemplating some important changes and improvements upon his farm, will sell, *without reserve*, his entire herd of thorough bred, and high grade Short-horn cattle, consisting of upwards of ONE HUNDRED head of Cows, Heifers, Bulls, and Bull and Heifer calves.

This valuable herd of cattle has been nearly all bred by the subscriber, on his farm, and under his own eye, with a particular view to their milking quality, which he believes he has been successful in developing to a degree not excelled in any herd of cows in the United States. Ever since the year 1834 he has been engaged in breeding Short-horns, in the belief that no cattle kept by the farmers of this country, were equal to them in all their qualities, as dairy and feeding animals, and this belief has been fully confirmed by seventeen years experience.

Commencing with animals selected from the best thorough bred stocks, then to be found in this country, this herd has been continually added to, and improved by selections from the best imported stock, and their immediate descendants. During the years 1845, '46 and '47, the Short-horn blood of the late celebrated Thomas Bates, of Kirkleavington, England, was resorted to in the use of the imported bull, Duke of Wellington, and of Symmetry, (by Duke of Wellington, out of the imported Bates Cow, Duchess,) belonging to Mr. George Vail, of Troy, N. Y., which bulls were hired of Mr. Vail for three years. The animals of this herd, since grown up, inherit, more or less, of that blood, which is believed by those having opportunity to judge, both in its milking and feeding qualities, to be equal to any other previously imported; and that belief is confirmed by the prices obtained during several years past, for animals descended from that stock.

For the quality of the stock bred by the subscriber, he can, without vanity, refer to the recent Short-horn sales of Messrs. J. F. Sheafe and Lewis G. Morris, in which some of the highest priced animals were immediately descended, or purchased from this herd. The unrivalled cow, "Grace," owned by Messrs. Sherwood and Stevens, and probably the best *fat* cow ever bred in America, described in pages 183 and 184, vol. x., of the American Agriculturist, was bred by the subscriber; and numerous animals in various parts of the United States, the West Indies, and the Canadas, which have sprung from his herd in years past, may be referred to.

In 1850, the imported bull, Duke of Exeter, of the Princess tribe of Short-horns, (for pedigree of which see (10, 152,) vol. ix., of the English Herd Book,) sent out from England for Mr. Sheafe of New-York, by Mr. Stevens, from the distinguished herd of Mr. John Stephenson of Wolviston, England, was purchased and introduced into this herd; and about forty of the cows and heifers are now in calf to him, all of which will be catalogued for the coming sale. In the quality of his flesh, and in the milking excellence of his ancestry, no bull imported in the into the United States can surpass the Duke of Exeter. His own stock, in the hands of several gentlemen in the State of N. York, are confidently referred to as evidence of his value.

The herd now offered for sale for sale will consist of about FIFTY, thorough breds, including cows, heifers, and heifer calves; and probably ten or twelve young bulls, and bull calves. The remainder, about fifty in number, will comprise young cows—good, proved, milkers—heifers and heifer calves, together with a few superior bull calves, from the best milking cows, of high grade, Shorthorns, with an occasional dash of Devon blood intermixed—the best of useful, family cows.

All the calves, or nearly all, both thorough-bred and grade, will be the get of the Duke of Exeter; and all the cows, and two-year-old heifers will be bulled by him, (if he lives,) previous to the sale; thus will be combined the blood of the Bates, and the Stephenson stocks, comprising as much excellence, both in milk and flesh, as can be found in any animals whatever.

The sale will be made early in the month of August next, at or near Albany, New-York, for the greater convenience of purchasers generally.

Due notice of the day and place of sale will be given in the several Agricultural Journals; and catalogues describing each animal of the herd, will be published in the month of June, preceding.

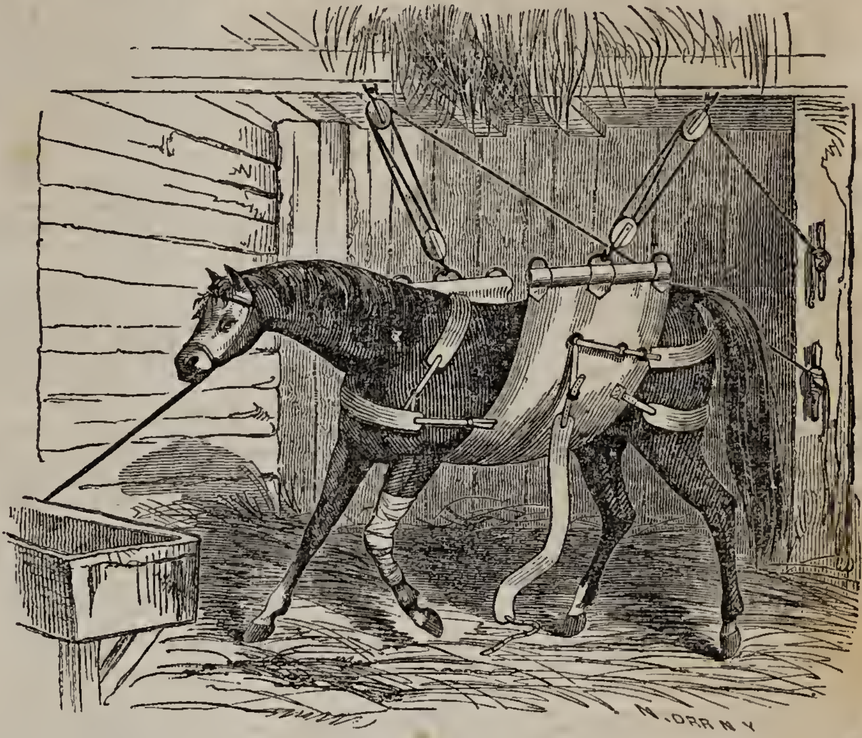
For further particulars, inquiries may be made by letter, directed to the subscriber, or to A. B. ALLEN & CO., New-York.

March 1. LEWIS F. ALLEN, Black Rock, N. Y.

FARMERS, HORSE BUYERS, BREEDERS, BREAKERS, SMITHS, &c.

BEST WORK ON THE HORSE.

SENT FREE OF EXPENSE BY MAIL.



NOW ready, the Seventh Thousand of "Youatt on the Structure and Diseases of the Horse," with their remedies, brought down to 1846, by W. C. Spooner, M. R. C. V. S., to which is prefixed an account of the breeds in the United States, compiled by H. S. Randall, with 55 illustrations, large 12 mo., 483 pages—price $1.50, and for sale by booksellers generally, throughout the United States.

Orders should be addressed to
DERBY & MILLER,
Publishers, Auburn, N. Y.

N. B. On receipt of the price we will forward one copy free of expense to any place in the United States.

"Every man who owns a good horse—the noblest, as well as the most useful of animals, owes it to himself to understand well, matters pertaining to his healthy preservation. Randall's 'Spooner's Youatt,' is the greatest work of the age upon this particular topic."—Am. Courier.

"No less valuable than the animal it describes. Every man who owns or drives a horse, needs this book as much as a horse needs a harness in which to perform his labors, if he would know how to make his beast of the greatest possible service to him."—Boston Farmer.

Jan. 1—3t. j.m.m.

Imported Consternation.

THIS celebrated thoroughbred horse will stand, this season, as heretofore, at the farm of the subscriber near Syracuse. Terms $10, payable in advance, for which a receipt will be given, promising to refund the money, if the mare is proved not to have got in foal, and provided also she is left with the subscriber, or regularly returned to the horse during the season, or until the groom is satisfied she is in foal. Pasturage of the best character furnished at 3s. per week. No mares taken except at the risk of the owners, in all respects.

Syracuse, April 1, 1852—3t. J. B. BURNET.

FOR SALE,

THE THOROUGH BRED STALLION HORNBLOWER. I desire to sell this valuable horse for the low price of $300. His pedigree may be found in the American Turf Register.

Batavia N. Y., April 1, 1852—2t.* EDGAR C. DIBBLE.

Morgan Horse Trustee.

THIS horse will stand, (for a limited number of mares,) the present season, at the Farm of the subscriber, within five minutes drive of Union Village, Washington county, N. Y.

Pedigree of Morgan Trustee.

Sired by the old Gifford Morgan—gr. sire, the Woodbury or Burbank Morgan—gt. gr. sire, the original Justin Morgan horse.

His dam was sired by old Morgan Bulrush—his gr. dam by Morgan Fortune—his gt. gr. dam by the original Justin Morgan.

The dam of Morgan Fortune was sired by the original Justin Morgan.

CERTIFICATE.—We hereby certify the above to be a correct pedigree of Morgan Horse Trustee, bred by us. and this day sold to Mr. Mowry of Washington county, N. Y. Signed, Walpole, N. H., March 5th, 1852.
FREDERICK VOSE.
BENJAMIN GATES.

It will therefore be seen that Morgan Trustee is of exactly the same degree of Morgan blood, as was the old Gen. Gifford Morgan. The old Gifford being dead, Trustee is the highest blooded Morgan stud now living.

He is a dark mahogany bay color, with black main and tail; of fine form and action, and will be four years old the 16th day of May, 1852. Terms $10 to ensure a foal.

Mares disposed of before the usual time of foaling, will be considered in foal, and charged accordingly. LE ROY MOWRY,

April 1—3t. Greenwich P. O., Washington co., N. Y.

Horse Gen. Gifford Morgan,

WILL stand, for a limited number of mares, the present season, at the Farm of the subscriber, within five minutes drive of Union Village, Washington co., N. Y., and at the same stable with Morgan Horse Trustee.

Gifford Morgan, was bred by Wm. Arnold of Walpole, N. H. He is three years old the 24th day of May, 1852—is a horse of splendid form and action, and a perfect pattern of his celebrated sire. His color is a beautiful dapple chestnut. He was sired by the old Gen. Gifford Morgan. His dam is one of the best mares in that section of country, and whose colts invariably bring exorbitant prices.

Terms $10, to ensure a fold. Mares disposed of before the usual time of foaling, will be considered in foal and charged accordingly.

LE ROY MOWRY,

April 1—3t. Greenwich P. O., Washington co., N. Y.

Union Agricultural Warehouse and Seedstore.

RALPH & Co., No. 23 Fulton Street, New-York, near Fulton Market,

DEALERS in all the most approved Agricultural and Horticultural Implements, Imported and American Field and Garden Seeds, Ornamental Shade and Fruit Trees, Guano, Bone Dust, Poudrette, &c. Wrought Iron Plows, Trucks, Barrows, &c., &c., always on hand. Also the Excelsior, or California Plow.

New-York, March 1, 1852—3t.

Black Hawk Colt.

THE BLACK HAWK COLT RAVEN, will stand at the stable of the subscriber, the ensuing season, will serve a limited number of mares. Raven will be four years old the first of June next. He resembles his noted sire closely, except that he is larger, weighing at this time about 1100 lbs. He gives promise of making an extraordinary trotter, and is one of the *very best* of the Black Hawk Colts. His dam is a much admired Morgan mare—great grandsire, Cock of the Rock.

The subscriber also offers for sale his Two-Year Old Stallion Colt, Falcon; sire, Falcon—grandsire, Black Hawk—dam, a well blooded Virginia mare. Falcon is a very beautiful animal, possessing in a remarkable degree the Morgan characteristics—of a kind and docile temper, already well broke to the harness, in which his action is bold and elegant. If he is not sold he will remain at the stable of the subscriber for the coming season. ROBBINS BATTELL.

Norfolk, Conn., March 1, 1852—3t.

Ayrshire Bulls for Sale.

THE thorough bred Ayrshire Bulls "General Taylor," and "Young Prince,"—the former is three years old, and the latter two years old next April. Both of them were sired by the Massachusetts Society's Imported Bull "Prince Albert," and are out of the fine full blooded Cows "Diana," and Primrose. They are in color dark brown—perfectly sound and docile, and are in all respects as desirable animals for breeders of dairy stock, as can be found in the country. For terms apply to SAMUEL HENSHAW.

Boston, March 1, 1852—3t.

Devon Bulls for Sale.

THE subscriber offers for sale, two young Devon bulls, called "Washington" and "Ajax."

Washington was dropped the 28th March, 1851. Sire, bull Molton—grand sire, celebrated bull Major, bred by R. C. Gapper, and now owned by Lewis G. Morris, Esq. Major took the first premium at the State Fair at Albany, in 1850—and is admitted to be the best Devon bull ever brought into the United States.

Dam of Washington, cow Beauty—grand dam, cow Sophia—both bred by Ambrose Stevens, Esq., and both received the highest premiums in their respective classes at the State Society's Shows, in 1849 and 1850.

Bull Ajax, was dropped the 7th of August, 1851. Sire, bull Molton—dam, cow Ruby.

Ruby was bred by Mr. Cowles of Farmington, Ct., and was sired by bull Rover, bred by Lewis F. Alllen, Esq., Black Rock.

Price for Washington $75, for Ajax $50, or will be exchanged for Heifers of equal age and pedigree. Address the subscriber at Greenwich, Washington co., N. Y. LE ROY MOWRY

April 1—3t.

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WATER WHEELS.

THE subscribers are making with success, Jagger's improved FRENCH TURBINE WATER WHEEL.

Tables showing the power and capacity of the same can be had on application.

JAGGER, TREADWELL & PERRY,
Eagle Foundry and Machine Shop,
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THE subscribers offer for sale an improved Subsoil Plow made under the advisement of Prof. J. J. Mapes, and free from the objections urged against those formerly in use.

The wearing parts are so arranged that they may be easily and cheaply renewed, while the amount of force requisite to move them, is less than half that required by those previously made. Price $8.50 and $9. For sale by

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FRESH SEEDS—English and Italian Ray Grass, Sweet Vernal Grass, White Clover, Lawn Grass, Lucerne, with a variety of choice Garden Seeds of recent importations, for sale at the Union Agricultural Warehouse and Seed Store,

RALPH & CO.,
May 1—1t. No. 23 Fulton st., near Fulton Market, N. Y.

WHEELER'S Horse Powers, Threshers and Separators, for sale at Manufacturer's Prices, at the Union Agricultural Warehouse and Seedstore, 23 Fulton Street, near Fulton Market, New-York. May 1—3t.

SUBSOIL PLOWS, recently improved by Prof. J. J. Mapes, together with an assortment of the most approved Plows for Sward, Stubble, and New Land—also Side Hill and Double Mould-board Plows, Cultivators, Harrows, &c., for sale at the Union Agricultural Ware House and Seed Store, RALPH & CO., 23 Fulton
May 1—3t. Street, New-York, near Fulton Market.

EMERY & CO.'S Horse Powers and Threshers, for sale at Manufacturer's Prices, by RALPH & CO., 23 Fulton Street, New-York. May 1—3t.

Prouty and Mears' Plows.

A LARGE assortment can be found at the State Agricultural Warehouse, No. 25 Cliff street, New-York.
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Field and Garden Seeds,

GROWN expressly for our sales, suitable for any climate in the United States. A large assortment may be found at

LONGETT & GRIFFING'S.
May 1—1t. No. 25 Cliff street, New-York.

United States Agricultural Warehouse and Seed Store.

JOHN MAYHER & CO.,

No. 197 and 550 Water street, New-York.

THE subscribers solicit the attention of the public to the large and varied assortment of Agricultural and Horticultural Implements, Field, and Garden Seeds, which they have constantly on hand, and offer for sale at the lowest prices, and on the best terms. Among which may be found the following, viz:

PLOWS of every size and pattern now in use, and adapted to every kind of soil and different modes of culture. Also, the genuine Eagle D. and F. Plows, which have always taken the premium wherever tried or tested.

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FIELD and GARDEN ROLLERS, with cast iron sections of one and two feet, and can be easily arranged on a shaft for any desired width.

CULTIVATORS—Thirty different kinds and sizes, wire and wrought iron and steel teeth.

SEED SOWERS, a great variety, for man and horse power, that will plant all kinds of seed at any required distance apart.

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Among our assortment may be found every article necessary for the Farm, Plantation and Garden, such as hoes, rakes, spades, shovels, scythes, snaths, grain cradles. hay and manure forks, ox yokes and bows, &c. &c. Connected with our establishment, we have a large Machine Shop and Iron Foundry, employing upwards of one hundred and fifty hands, where we are prepared to make to order any kind of implements in our line.

JOHN MAYHER & CO.,
May 1—1t. 197 Water street, New-York.

Wood's Renovating Salts, or Bone Manure.

WE are now receiving large quantities of this valuable Manure, put up in barrels, which we will sell at one cent per pound. This article is made from the following ingredients, viz:

Charcoal, Bone dust, Plaster, Potash, Calcined Charcoal, Glauber Salts, Saltpetre, Oil of Vitrol, Salts of Ammonia. Gas Liquor, and Bullock's Blood.

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State Agricultural Warehouse and Seed Store,
May 1—1t. No. 25 Cliff street, New-York.

We hereby certify that our Renovating salts are composed of the ingredients represented, and pledge ourselves to refund the money in all cases to purchasers, who can produce satisfactory proof to the contrary.

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PERUVIAN GUANO

AND other Fertilizers. Several hundred tons of first quality of Peruvian Guano, constantly on hand for sale.

Also, BONE DUST, PLASTER OF PARIS and POUDRETTE.

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Water-st., New-York.
Jan. 1—tf.

Pulverised Charcoal,

PREPARED for Agricultural purposes, put up in barrels, at $1 per barrel, including the package. In bulk $18.75 by the 100 bushels. For sale at the State Agricultural Warehouse.

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A First Class Dairy Farm for Sale.

MY farm of 320 acres, four miles south of the village of Oxford, Chenango county, N. Y., and near the Chenango Canal. 250 acres are under high cultivation, durably fenced, and well and permanently watered. The remainder is well timbered. It has a large two story mansion, five large barns, and sheds and out houses, in good repair. The soil is deep and of superior quality. It is admirably adapted for a dairy, or for grazing and grain; has a fine orchard of choice grafted fruit; and for profit, health, and beauty of location, cannot be surpassed. It is fully supplied with farming tools, and about fifty head of cows and young stock, all or any of which may be had with the farm. The New-York and Erie Railroad furnishes ample facilities for forwarding produce to the New-York market at all seasons, and the route of the contemplated Albany and Binghampton railway, passes within a few miles of the farm. The farm can be conveniently divided. Price low—title perfect. Terms most easy.

G. VAN DER LYN,
May 1, 1852—tf. Oxford, N. Y.

THE CULTIVATOR

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LUTHER TUCKER, PROPRIETOR.

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THE CULTIVATOR.

TO IMPROVE THE SOIL AND THE MIND.

NEW SERIES. ALBANY, JUNE, 1852. VOL. IX.—No. 6.

Mechi's High Farming.

ONE of the most interesting papers on agriculture which we have read for a long time, is I. J. MECHI's account of the operations of his farm, a pamphlet of 44 pages, recently published in London. This distinguished agriculturist, as most of our readers know, has attracted a great deal of public attention by the lavish expenditures he has bestowed in improving and enriching his land, to which he has thus imparted a degree of fertility, far in advance of that attained by ordinary British farming, his object being to reach that degree of high culture given to the best kitchen gardens. To enable the reader at once to judge of the extent of his enriching process, it may be stated that he paid in a single year for oil-cake and grain, to be consumed as food for stock for the increase of manure, a sum little short of *eight thousand dollars*, his whole farm consisting of only 170 acres, of which 125 is his own land. The same year he bought stock for the same purpose, to an amount of more than three thousand dollars, and nearly seven hundred dollars worth of guano, phosphate of lime and chalk. A great deal of curiosity has been excited to know the footings of his balance sheet, at the end of the year—that is, whether he is losing or gaining by this bold and untried system. He has satisfied this curiosity in the pamphlet before us.

His wheat crop of 72 acres, (including one field injured by blight) yielded an average of 36 bushels of marketable wheat per acre; twenty-seven and a half acres of potatoes, "only half a crop, having been injured by drouth," afforded but 145 bushels per acre; ruta bagas produced 18 tons, and mangold wurzels 32 tons per acre. Ten thousand dollars worth of meat and live stock were sold, the results of his system for manuring, although not paying cost independently of the manure afforded. On the whole, taking into consideration the rapidly improving process the farm is undergoing, he regards the results as highly favorable, much more so than by ordinary cultivation.

Leaving entirely out of the calculation the expenditures in the purchase of stock and food solely for the manufacture of manure, and the proceeds of the sales of meat and stock, his expenditures including rent, taxes, labor, purchased manures, interest, wear and tear, &c., are £1,064; his crops amount to £1,135, leaving a balance of £71 in his favor, although his root crops are not given at market but at *consuming* prices. For example, his mangold wurzels are placed at 6*s.* per ton, while he could have sold them at 9*s.* 6*d.* per ton, but in that case he would lose the manure made from their consumption. It is to be remembered also, that farming in England is at present quite a retrograde or down-hill business. Five thousand dollars product of a farm of 170 acres, with potatoes at 25 cents, wheat at $1.25 per bushel, and roots at $1.50 per ton, as these were sold, would be remarkable farming in this country.

His accounts show that there was £10 worth of meat made, and £5 worth of grain produced, that is, over *seventy dollars*, for every acre on the farm. His neighbor assured him that he would sooner occupy such land at 40*s.* rent per acre, than to hold his own *free* of rent. Yet he affirms that when he first occupied the land, the roots grown were scarcely larger than apples, while now "plenty of them weigh seventeen pounds each."

Some interesting facts are furnished, showing the permanency of the improvements. He first began with "artificial manures," (guano, &c.) which operated powerfully while the land was yet poor, but experience soon taught him that they were more costly than manure produced by feeding stock. The former acted immediately and were quickly expended; the latter were greatly superior in durability. Speaking of the retentive tendency of clay soils, he remarks, "So striking is this retentive tendency, that I have been able to distinguish for five years, that portion of one of my fields which then received good manure, although the whole has been since farmed and manured alike. I could name similar instances, showing the difference for twelve years, but the most forcible evidence of good cultivation and manure was the following:—Walking, before harvest, with a friend in his wheat-field, I was struck with the marked superiority of one corner, and asked for an explanation. "Oh!" said he, "this portion was once a cottage garden." "How long ago?" "Why," said he, "I have known the field fifty years, and it was ten years before that time."

"Some idea," he adds, "of the permanently improved condition of the clayey portion of my land may be formed when I tell you, that the yellow sub-soil would formerly be found in a four-inch plowing, but now a good digging in the furrows will fail to reveal it; and even at lower depths the pale bird-lime-like appearance is changed to a mellow and darker colored friability." So much for drainage, cultivation, and manure!

"It may be said that the land may be made too rich; but the experience of our gardeners must teach us that there is no fear of such a result for strong-growing grain and root crops; and we can guard against over-luxuriance in our grain crops by thinner and later sowing, and by compression of the soil. To me it is a matter of astonishment that we do not apply gardening principles to our farms. It either arises from a want of capital or observation; and I am so struck to see the cottager's luxuriant garden abutting on the poverty-stricken field of the extensive farmer—reading, as it were to its neighbor, a daily lecture on man's prejudice and improvidence." He remarks in another place, that the fattening quality and density of the root crops have greatly increased with the density of his soil, and his wheat seldom weighs less than 63 lbs. per bushel.

Farmers are usually aware of the advantages of draining. But the following will be new to some: "Although I lose some advantages by my personal absence, I farm at much less cost than the general run of farmers holding unimproved farms. The small number of horses I keep will prove this. For instance, owing to drainage, my land works one horse lighter, and I can plow at almost any time; while on undrained lands there are many idle days and weeks for the horses."

Some of the other economical arrangements are thus pointed out: "My manure is carted at once from under the animals and plowed in, thus avoiding the double cartings, fillings, turning-over, and waste of the ordinary well-washed dung-heaps. Owing to the absence of fences,[*] and by the squareness of my fields, two horses always plow an acre per day; then, by steam power, the grain is threshed as fast as it comes from the stack, instead of being barned and handled twice. By using Garrett's horse-hoe, I can hoe better and deeper at one shilling per acre, than by the hand hoe at three shillings and sixpence.

"There are many other advantages arising from the removal of four and a half miles of fences; such as gain of space, ready drying and warming of the soil, &c., to say nothing of the benefit and saving resulting from being now able, owing to drainage, to fold my heavy land with sheep.

"Twice harrowing is now sufficient on my soil, where eight and ten times used to be occasionally required.

"It must not be forgotten that the valuation of my rental was raised last year *three-fold*, a pretty clear evidence of the benefits resulting from my improvements."

"Another important matter is the improvement of tenacious clays, by burning and carbonizing—the more foul and neglected the soil, the more grateful for the operation. I have converted our concave muddy lanes into convex dry ones, by burning some 2,000 cubic yards of their tenacious yellow clay shoulders, and removing it as brick dust to our fields, at a cost of 1*s.* per yard."

The remarks in this pamphlet on the condition of the agricultural laborers, strongly evince the humane feelings of the writer, and cannot but be read with interest by all those who regard human beings as of more value than sheep, or than fine, sleek, well-fed cattle.

The following must prove *highly flattering* to such of our own countrymen as have boasted long and loud of the achievements of McCormick's reaper: "I shall always feel gratified (without vanity I hope) that the first trial in this country of what are called the American reaping machines, was made on my farm. The pressure of necessity caused in America the development of Scottish ingenuity, for I have been informed that Mr. McCormick is a Scotchman, after all." !! Believing, as we have long done, that merit is much better than fame, and that every true patriot must desire that his countrymen might possess real worth, rather than contend for notoriety, we forbear any comment, especially as there has been enough boasting over this machine to last us at least for half a century.

Richness of Milk.

It is an interesting subject to dairymen and the breeders of cows, not only to know the quantity of milk afforded by single animals, but to ascertain the amount of butter yielded by a given quantity. The rigid accuracy of the common method with the lactometer is doubted by many; and we greatly need careful experiments, instead of guess-work, for the determination of such questions as these, as well as the relative amount of cheese afforded under like circumstances. Farmers could then calculate with some degree of certainty, the relative as well as real profits, likely to result from either branch of the dairy business, with such animals, facilities, and markets, as they may possess.

As a contribution towards this end, we furnish the following statement which we have drawn from the recent proceedings of the Worcester (Mass.) Ag. Society, and added a few deductions. The experiments appear to have been conducted with care and precision. The first set of experiments were made in the *first nine days of summer*.

	lbs. Milk.		Butter.	
1st cow, gave,	377	making	15 lbs.	15 oz.
2d “	327	“	12	5
3d “	254	“	13	10
4th “	360	“	17	2
5th “	266	“	12	9
6th “	299	“	13	14
7th “	295	“	14	6
8th “	290	“	13	6

During the *first nine days of autumn*, the same cows afforded the following result:—

	lbs. Milk.		Butter.	
1st cow, gave,	210	making	10 lbs.	14 oz.
2d “	218	“	8	10
3d “	146	“	7	7
4th “	195	“	9	8
5th “	33	“	11	0
6th “	235	“	9	14
7th “	222	“	12	8
8th “	201	“	12	0

By simple calculation, we get the following number of pounds of milk, required for a pound of butter from each cow:—

	1st of summer.	1st of autumn.
1st cow, required,	23 lbs. milk.	19 lbs.
2d “	26 “	25
3d “	19 “	20
4th “	22 “	20
5th “	21 “	21
6th “	22 “	24
7th “	20 “	18
8th “	22 “	17

This is an average of 22 lbs. of milk for each pound of butter in summer, and 20½ lbs. in autumn. From these results it appears that the common opinion that autumn milk is much richer in butter is erroneous. Some degree of uncertainty may exist in consequence of differing circumstances under which the trials were made. We are not informed whether the difference in the richness of the milk was owing to any marked difference in breed; indeed we infer that all were mostly of "native" blood, or in other words made up of that inextricable mixture of sorts which can never be traced to its origin. The results given indicate much uniformity in quality, much more so than is found in different distinct breeds experimented upon in England. According to Henry Colman, the following results in richness were obtained on a farm near Liverpool:—

---

[*] The reduction but not entire disuse of fences. We are informed that in some parts of England, sixty or seventy acre farms are divided into twenty-five fields, on an average of about two and a half acres each. "Imagine on such a farm, twenty-five gates to open, shut, and keep in repair, twenty-five squares of hedge rows and timber trees, eating up the poor farmer's crops; and twenty-five squares of head-land to turn upon and destroy."

Yorkshire and common cows,	8 per cent.
Ayrshire,	15
Alderney,	23½

That is, the Alderneys afforded three times the butter made from an equal portion of milk from Yorkshires. Thomas Bates furnished the following minutes of his own experiments:—

1 quart milk,	West Highlanders, produced,	2	oz. butter.
"	Half bred Durham,	2½	"
"	average of Short-horns,	1	"

Of some select or extra stock, the following was the result:—

1 quart milk,	Short-horns, produced,	2½	oz. butter.
"	West Highlanders,	2½	
"	half-bred Durham,	2½	

Thus, we perceive, that by selection, the different breeds afforded a very nearly equal degree of richness in this instance. We are certainly in great need of further experiments to determine whether there is a marked and uniform difference characteristic of each breed, or whether good and bad are not to be found equally in all. In either case, the determination of the quality of milk given by single animals would be of great practical value.

◆

Maple Sugar and Molasses.

With the annexed communication, we received, from the unknown author, a dozen pounds of maple sugar, fully equal in quality to any unrefined sugar we have ever seen. The remarks in relation to premiums on maple sugar, are worthy the consideration of Agricultural Societies. Eds.

Eds. Cultivator—I send you a sample of maple sugar, and my manner of making the same. Great care is taken to keep every thing pertaining to the manufacturing of this article, *sweet and clean.* The sap is carefully strained before boiling; the syrup is taken out of the pans, and allowed to stand 12 hours, when it is carefully poured off from the setlings and strained. Two quarts of sweet milk are stirred into syrup that will make about one hundred pounds of sugar. It is then put over a slow fire, and heat to the boiling point, when the scum is taken off and it is again strained into another kettle, and boiled down sufficiently hard not to drain when caked.

My boiling apparatus is taken from the Cultivator, new series, vol. 1, p. 22, excepting the wall to prevent the cold air from striking the sides of the pans. Great care should be taken to not have the sides of pans or kettles heated so as to scorch or burn the sugar, as there is where the dark color and bad taste is given to most of our sugar,—a taste which many think is peculiar to the maple, and can only be avoided by draining, dissolving, clarifying, &c. Now I think, could our sap be converted into sugar by one process, without being in any way adulterated, it would be almost equal in texture, and far superior in taste, to our best refined sugar.

I notice in awarding premiums on the best manufactured maple sugar, that the awards are given on sugars that have gone through the best process of refining after being made; it matters not of what quality the sugar may be in the first place; it may be made in the most slovenly and dirty manner, and be burnt black and bitter into the bargain; if the maker by some process makes it white and nice after that—no matter if the sugar loses the taste and flavor which is peculiar to the maple, and makes it more valuable than the cane, or what the loss or cost may be—he is sure to get the first premium, in preference to a well manufactured article. Now I think there ought to be a distinction made between the best manufactured, and the best refined sugar. I do not think a man is entitled to the first premium, because he can take fifty pounds of sugar and refine it down to twenty-five pounds, although it may be equal to our best refined sugar. The object in awarding premiums, I take it, is to encourage improvements in the manufacturing of this article for culinary purposes; and I give it as my opinion that the well manufactured article, is worth more, pound for pound, than the refined one; therefore should be entitled to the first premium.

To make this sugar into syrup for the table—put two pounds of sugar (cut or broken into pieces,) into a tin basin, add one-third of a quart of water—put it on to a stove, where it will soon dissolve. When dissolved it should be made to boil. If too much water is put in, it should be boiled down so that when cool it will be about as thick as good honey. Syrup made in this way, will be found to be as good as when first made new from the sap. E. B.

P. S. The sugar I send you, is a fair sample of three thousand pounds made from our works.

◆

Value of Green-Houses to Invalids.—Dr. A. H. Stevens, of Astoria, N. Y., long so eminent in his profession, furnishes the following interesting fact to the *Horticulturist.* "Having for many years suffered from a pulmonary complaint, I am led to avail myself of your Journal, to offer some observations on a subject lying mid-way between our respective callings. Some ten or twelve years since, in visiting the green-house of Mr. Niblo, then my neighbor in Broadway, during the winter, I found the atmosphere exceedingly congenial. It abated my cough, rendered the expectoration loose and easy, softened the skin, and induced a comfortable state of feeling, approaching to exhilaration. Wishing to have such an atmosphere at command, I constructed a cold grapery, in which, whenever it has been convenient, I have passed the hours of reading and study. The climate of a cold green-house, in a sunny day of the winter or spring, is a Florida climate, and is entirely different from that of an artificially heated atmosphere. I venture to recommend it under most circumstances, to pulmonary invalids, in preference to the more expensive plan of removal to the south, involving, as it does, much discomfiture, interruption of business, hazardous exposure, and entire separation from friends."

Notes of a Tour in France.---No. 2.

The National Agricultural School of Grignon, being within a few miles of Wideville, where I was staying, I drove over one fine morning to see it. This is one of the most flourishing of the several government institutions that have been established, of late years, in France; and it is only within a comparatively short time that the importance of these schools has been acknowledged by the government; but no sooner was it fairly convinced of the fact, than, with the usual promptitude of royal proceedings, several of them were founded in the various departments, and liberally endowed. They have been conducted with entire success, and yearly send forth a number of scientific and practical farmers to diffuse the information they have obtained throughout the land, besides contributing to the experimental and theoretical progress of the science itself. M. Bellat, the director of the establishment, is most admirably fitted for the important post he occupies. Being devotedly fond of the pursuit, his whole mind and energies are given to it, and the prosperous state of the school shows with what good result. He has traveled and studied the agriculture of foreign countries, and is thus enabled to adopt everything that is appropriate to his own. M. Bellat informed me that their graduates had already spread themselves over the four quarters of the globe—one was near Constantinople, overseeing an establishment of the Sultan's—another was in Asia Minor—two were in the United States, and M. Pichat, the able director of the Rambouillet flock, was himself a graduate. Such results were most gratifying proofs of the advantages of these institutions.

The farm consists of about three hundred acres under very high cultivation, and was formerly an estate belonging to a noble family, and the Chateau or mansion house, a fine old building of the time of Louis XIII, is still standing, and contains the dormitories of the students, lecture rooms, &c. &c. I was told it needed repairs exceedingly, so much so that visitors were not now admitted. The farm buildings are very large and commodious and directly adjoining the Chateau; the first of these was the cow stables, a long range of well ventilated stone buildings, with a row of wide stalls running the whole length of one side, and a broad alley behind them. About a hundred cows are kept for their milk, which is taken to Paris; it sells at the stables for about seven cents a gallon. The cows are mostly of the dun Swiss breed, sometimes crossed with the Durham; they are very large, and generally yield abundance of milk, but must be great consumers; when dried off they feed kindly. Over each stall was a printed label, with the name and age of the cow and the quantity of milk she gave per day. The half dozen bulls I saw did not strike me as anything remarkable, and were decidedly deficient in handling.

The Director has great faith in Guenon's theory of "Escutcheons," as signs of the milking property, and told me that in selecting cows, he always had reference to it, and usually found it correct. This testimony, coming as it does from a man of such large experience, enjoying such ample opportunity of testing it, should go far to give credit to a theory, which, if it be correct, is all important to dairymen. My own experience and observation would decidedly favor the theory, not perhaps in all its minutia, or to the whole extent claimed by its author. I found that a careful register was kept of the course of breeding pursued, as well as of the various experiments in this little understood science, and an annual report drawn up.

We next went to the pig-sties, and found the swinish multitude in great force, of every breed and variety; numerous crosses had been tried, but without any striking results. The English breed appeared to be the favorites, and amongst these I observed some rather inferior looking Berkshires. The buildings and arrangements for them were convenient, but without novelty.

I was more disappointed in the sheep than in any other of the stock; they are by no means worthy of the establishment; nor was I surprised when I found that the Director had been seized with the English mania, so prevalent here of late, and had been trying crosses of the South-Down, the Dishley and the New Kent breeds on the Merinoes, in nearly all cases using Merino ewes; the results, in my opinion, are unsatisfactory. The characteristics of the two latter breeds especially, being so widely different from those of the Merino that they have not amalgamated well; the progeny is uneven, inclining decidedly to one side or the other, and inferior to either parent; with the South Downs the cross was more successful; but I regretted to see so mixed a flock, where I had expected to find good specimens of the true French Merinos. M. Bellat said, in answer to my remarks, that fine wool was not paying well, and that the people wanted food rather than clothing. These considerations had led to the experiments with which he seemed satisfied, and he still hoped to combine the excellencies of mutton sheep, with a sufficiently fine fleece to insure an almost double profit from the one animal.

The system pursued here of feeding and of registering consumption and production, was admirable; every animal or set of animals is numbered, and a separate account kept with each—(this is done by the students as part of their duty.) At the doors of the buildings are tables, giving the quantity, quality, and price of the food consumed per head daily, with averages, estimates, &c., and in the fattening houses the weekly and monthly increase in weight, was added. These tables are renewed and altered as often as changes are made. The calculations are very close, and probably as accurate as they will admit of. The many difficulties of carrying out experiments of this kind are only to be known by actual trial.

The root cellars were quite novel in their construction, being a series of tunnels excavated in a high bank of calcareous tufa, which from its close texture, required no arching of masonry, they were about eight feet high by as many broad, and fifty or sixty in depth; at the further end was a shaft or chimney ascending into the open air for ventilation; the floor was rammed hard and smooth, allowing carts easily to back in and readily unload; a space is always left above the roots, immediately under the roof, and in mild weather by opening the doors a current of air passes the whole length of the tunnel, giving a perfect ventilation through the chimneys, and thus making it easy to preserve the roots at the required temperature. The crop of mangel wurzel is very large, as the cows are fed principally on them during the spring, for which purpose they are cut into slices by rather a rude machine. Indeed all their implements struck me as very coarse and ill made, and I was surprised to see such excellent work with such poor tools. The plows are very heavy clumsy affairs, with a short beam inclined very much upwards, resting on a train of two wheels, with cumbrous machinery for adjusting the depth of the furrows, by raising or lowering the beam; yet I saw admirable work done by these plows, on even rough land! I will here remark that at Grignon they were trying an American side-hill plow, that had been sent out by Mr. Taintor, and its simplicity and effectiveness was much admired.

In the stables were about twenty-five strong Norman horses, mostly mares, these animals being used as breeders besides performing the work of the farm; here, as in many parts of France, the stablemen, cowherds, and shepherds, always occupy a sort of birth or "bunk" in the houses of their respective charges, which are thus never left alone, and to this fact may be attributed, especially in sheep, the few losses by accidents, &c., that are so usual in large establishments where this precaution is not taken.

Belonging to this institution is an extensive and well stocked garden, in which horticulture is especially taught as a necessary adjunct to its sister science. A mulberry plantation and silk-house form part of the establishments, the culture of silks being included in the course of instruction, as in the southern parts of France it is an important branch of industry.

The greater portion of the labor on this farm is done by the students, who have also to attend the regular lectures, recitations, and other instruction in the various and numerous sciences related to Agriculture. There were at this time about an hundred pupils, all wearing a sort of uniform (as is the invariable custom of schools in this military nation) of a short blue frock or "blouse," which is also the regular agricultural dress, even of the gentlemen farmers of that country. F. M. R. *Morris, Otsego co., N. Y., April* 2, 1852.

Culture of Tomatoes.

Messrs. Editors—I wish to say a few words about growing tomatoes, which I think would be worth publishing, if it has not appeared before this from some other source. We hear people talk about planting tomatoes in sandy ground, that is not very rich, for the reason that they run all to vines and produce no fruit. Now my plan is to plant the seed in good rich ground, and allow them to grow until they have made *two, three or four* shoots from the stalk—after which, prune all the side shoots that come out, and follow this plan all through the season, every three or four days, and let the vines grow the full length, never pinching off the ends. In this way I can raise earlier and better tomatoes than by any other plan, and also a great many more of them. It is necessary to stake the vines up to keep them off the ground, and they will then grow from seven to nine feet long, with large bunches of tomatoes at the ends of the vines. Some of my neighbors have tried this plan and pronounce it far superior to every other. J. W. Clute. *Schenectady, April* 22, 1852.

Culture of Strawberries.

Eds. Cultivator—I do not know that the subject matter of my communication will appear sufficiently important for insertion in your Journal; but as it appears "quite a wonder" to me, I give you the narration.

I purchased last spring, for the purpose of agricultural experiment, a couple of acres on Division Avenue, Brooklyn, at $1,000 per acre—a price which the readers of your Journal have full liberty to laugh at.

As I had a great number of "whimsies" to work out, the greater part had to be devoted to "small truck." Among other things, Strawberries received some attention. In a bed 50 feet by 20, I set out May 15th, in rows 30 inches apart each way, 160 plants of the Early Scarlet variety. On the first of August I loosened all the runners that had set between the second and third rows, and turned them back between the first and second, and third and fourth, as they respectively belonged.

This, of course, thickened the plants between the first and second, and every alternate two rows—leaving the space between the second and third, and every alternate two rows, for a path. The yield was much lessened by a row of corn, planted across one side between two rows, which shaded and thinned the plants. The produce of this 160 plants was as follows: From the 1st to the 21st of June, I picked 69 quarts. Besides this, they were much exposed to plunder; about 20 persons at different times, plucked from the vines for immediate eating, so that the actual quantity could not be arrived at. As for the culture, there were no more pains bestowed upon them, than upon an equal space of potatoes. Thomas W. Field. *Williamsburgh, L. I. Jan.* 26, 1852.

Experiment in Manuring Corn.

The Journal of Agriculture gives a communication from W. R. Kimball of New Hampshire, describing a careful experiment with corn. Greensward was plowed in October, and manured highly next spring—it was plowed and harrowed, and planted with corn in hills of three grains each, three feet by eighteen inches. The seed was steeped six hours in a solution of chloride of lime, and in each hill was dropped a handful of compost made of plaster, unleached ashes, and hen manure—consisting of about three bushels each of hen manure and plaster, and eight of ashes. The ingredients were all dry powder. The corn came up quickly and grew with great vigor, and yielded about eighty bushels per acre. On two rows through the middle of the field, the chloride of lime and compost were omitted, with a greatly diminished result, or about thirty-five bushels less per acre.

Manures for Wheat.—The lands of Maryland and Virginia are wonderfully revived by guano. Robert F Brown states in the American Farmer, that one of his neighbors sowed seven bushels of blue-stem wheat on eight acres, and harvested over 33 bushels from one, with the application of 150 lbs. of guano per acre. Two other experiments given resulted nearly as favorably. Jos. W. Kay, another correspondent of the same paper, furnishes a statement of the mode in which Dr. E. P. White raised in one instance 54½, and in another 56 bushels per acre, by the application of lime, clover, plaster, and other manures, in connexion with deep plowing.

The Farmer's Wife.

Eds. Cultivator—So much has been said and sung in praise of "a farmer's life," that, apparently, no time or space has been spared to speak of the life led by his "better half." Our country is blessed with an abundant monthly harvest of leaves, containing valuable information in regard to the culture of almost all kinds of fruits and plants, and the appliances and means best adapted to the improvement and growth of the domestic animals—but these "lords of the soil," seem studiously to have forgotton that their houses, as well as their barns and pastures, contain *live stock*, to which a part of their attention should be given.

The farmer's wife should be an independent, healthy, happy, and cultivated woman—one on whose culture, both physical and mental, the agriculturist has bestowed at least *as much* thought as he has upon that of his swine or his turneps—but is it so?

When a young farmer arrives at an age that he wishes to choose for himself a fitting wife, he naturally desires one whose intellect and taste has been enlarged and educated to an equal degree with his own, and generally he prefers one who has either been reared upon a farm, or has become personally acquainted with rural pursuits; and his wishes are readily gratified, for girls who have been carefully trained and well educated, are happily, at this day, far from being rare, or difficult to find. A genuine love of good books, skill and taste in music, and the arts, combined with depth and strength of intellect, are possessed by many of the young girls who have enjoyed the privilege of a country birth and residence.

Such a person, not unfrequently unites her fate with that of a farmer, thinking no doubt, from what she has read in agricultural periodicals, that thus she can more certainly gratify her taste for horticulture and the embellishment of her home, and at the same time fulfil a more exalted destiny than she could expect to, if she was to become a part of the fashionable circle of the city or village. Yet she is ambitious to perform as much labor as her neighbor, who has for years been engaged in household labor, and therefore assumes the duties of house-wife, and maid-of-all-work, and her husband, who has been accustomed to see his neighbors' wives toiling from morning until night, in the cook and dairy-room, thinks it all right, with as little reflection as the peasant of Europe bestows upon the coupling his wife and mule together at the plow or the cart; and thus from mere custom, and want of thought, he allows the woman of his love to become his most devoted slave.

From this time forth, the life of the farmer's wife is one of confinement and unremitting toil. From early dawn until late at night, it is nothing but mend and botch, cook and bake, wash and sweep, churn and make cheese, wait upon her husband and his band of laborers, bear children and nurse them. No time for relaxation or enjoyment, or the improvement of her mental or social faculties is found. As the means of the farmer and his family increase, the *husband* becomes more noticed, and his circle of acquaintances and friends enlarges; he daily meets his associates and mingles with the world, but his wife toils on in the old dull routine, with nothing to break in upon the monotony of her existence, except perhaps the advent of another child, or the death of one to whom her her heart is bound in the strongest ties.

The husband, it may be, is engaged in some public business, or drives frequently to town for a market or for his pleasure, but he never thinks of his martyr wife, and the necessity there is in her nature, that *she* should share with him his pleasures and relaxations. *Her* labors are never ended, her cares never cease, until premature old age has come upon her, and with blanched and bowed form, she sinks into an early grave, leaving the children of her love, and the property she had saved and earned, to the care of a more youthful successor, who not seldom avenges these wrongs by tyrannising over the husband and abusing the children.

This is no fancy picture, or a delineation of what was in by-gone days, but unfortunately the original can be found in almost every neighborhood, and even among those who are called model farmers. Neither is it confined to the cultivators of the soil. All classes and occupations of men include too many in their ranks, who practically scout the idea that their wives and daughters are human beings, with *souls* in some way connected with their bodies, and that they are "endowed by their Creator with certain inalienable rights and privileges," among which are life and the rights to enjoy the pure air of heaven, uncontaminated with the odors of the kitchen or the steam of the wash-tub—that their social and intellectual nature is an essential part of them,—and that to live, in the full sense of the word, is to enjoy and increase the ability of enjoying these higher attributes, by a free and varied intercourse with the pure and the gifted of their own and the opposite sex.

We hope to see the day when men, even those who consider it a privilege as well as a duty to gain a livelihood from honest toil, will take as much pains to secure these social pleasures and innocent amusements for their wives and their daughters, as they do to give proper exercise and recreation to their horses and their cattle.

When farmers will consider it proper for the females of their families, to join with them in forming and executing their plans for the improvement of the soil and of society—when they become aware of the fact that their wisest advisers and their truest friends are to be found within the limits of their own households; and will invite their friends to their *homes*, and *there* form their *farmer's clubs*, and arrange their plans and examine their prospects, they will discover that the female part of the community have a genius above being simply their maids-of-all-work, mere labor-saving machines, designed to cook potatoes, or mend stockings; or to make fashionable calls, and repeat the silly nothings and nonsense of polite society.

Let farmers take as much pains to increase the happiness and cultivate the minds of the females of their households, as they do to enlarge their fields and fertilize the soil, and they will secure a harvest of more value than any or all to which a premium has ever been awarded by any agricultural committee ever chosen. C. H. Cleaveland.

Waterbury, Vt., May, 1852.

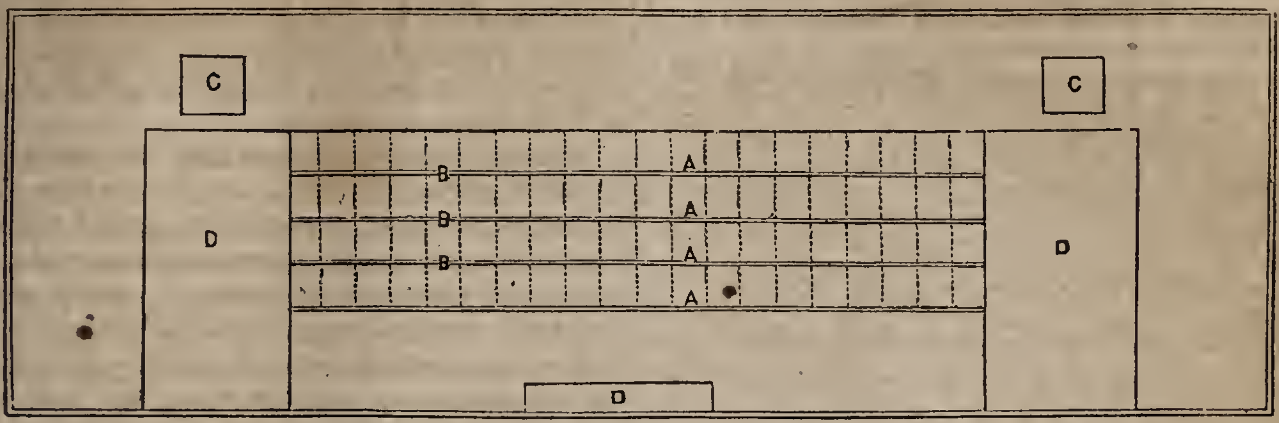

Fig. 1.

A Poultry House.

We think the following plan for a poultry-house, which we copy from the "Westchester (Pa.) Register and Examiner," will answer the purpose of one of our correspondents, who recently inquired for a design for a cheap and convenient henery. This may be cheaply built, and it appears to be well adapted for the purpose.

This design embraces some new features with regard both to efficiency of purpose and economy of expenditure. A handy farmer with the necessary tools can erect one for himself.

The building is designed to be 12 feet wide, 10 feet high in front, 4 feet high in the rear, and 50 long. The length may be greater or less, with reference to the number of poultry to be accommodated. The above dimensions are large enough for 150 to 200 barn-door fowls. The materials for rear and ends may be frame, brick or stone. The south slope of an embankment will be a good location, as warmth is an important point to be gained. The best material for roof, is straw thatch; this is warm in winter and cool in summer.

Fig. 1, represents the front view. A,A,A,A, are glass lights 8 by 10 inches; the dotted lines show where the edges of the glass meet each other. B,B,B, are boards three inches wide, nailed horizontally to upright posts, the upper edge being plowed to receive the lower end of the glass, and the lower edge rabetted to receive the upper edge of the range of glass immediately below, which is secured by putty. This arrangement is original and saves the expense of sash. C,C, ventilators, may be made to slide in groves, or hung on hinges. D,D,D, doors: If the length of the building does not exceed twenty or thirty feet, one of the large doors may be dispensed with. That portion of the front not composed of glass and doors to be weather-boarded. It will be better if the inside of all the walls are plastered.

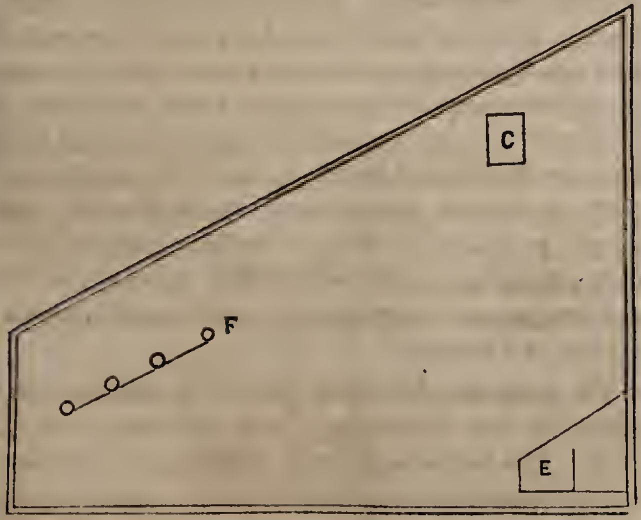

Fig. 2.

Fig. 2, represents an end view. C, ventilator, E, nest boxes, five feet long and two feet wide, entrance open at both ends, with a sloping lid hung on hinges for the purpose of taking out eggs. Each box to be divided into five compartments, with an open passage next to the wall, the whole length. These boxes to be placed against the front wall, immediately below the glass; also across each end. F, represents the ends of the roosting poles, four ranges of which, to run the whole length of the building. These poles should be 16 inches apart.

The space between the nest boxes and roosting poles is intended as a winter promenade and for feedigg and watering troughs. The object to be obtained by so much glass, in front, is warmth by the sun in winter. A good sized yard should be attached for an out-door range in fair weather.

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Raising Turkies.

Messrs. Editors—The means of quick and easy transportation by railroad, of late years, has made it of some consequence for farmers to pay more attention to their poultry. I think the breed of fowls is of as much importance to farmers, in proportion to their value, as the breed of cattle, sheep, &c.; but as the subject has been pretty well used up of late, I will merely say a few words about turkies; (don't try to raise them if you are a large farmer, for you can't do it.) I have raised a large number annually, for many years, and find that the common opinion, that turkey chickens are more tender than the chickens of barn-door fowls is a mistake—that is, when properly bred, save that from their half wild, roving disposition, they are liable to more casualties.

I am at some pains to change my gobblers often; a little close breeding will do, if you wish to fix a particular color, but it must not be carried too far, as this is the cause of much of the *poor luck* to which young turkies are liable. I set the first laying of eggs under dung-hill fowls. After hatching, if early in the season, the old one should be cooped for a couple of weeks; feeding often with milk, sweet or sour, mixed with middlings, or corn meal—don't be afraid to use plenty of meal, for a chick that is worth raising can't be killed by it. After getting to be a few weeks old, they will get most of their living in the fields, on insects, &c. Still they should be fed daily, as this, besides making them tame, will prevent their doing damage to growing crops. I sell in fall to poultry dealers, and as you will see by subjoined account, with a small profit for care and trouble.

For the year 1848 raised seventy turkies:

Turkies, Dr. To Indian meal and other feed,........	$15 00
Cr. By 55 turkies sold,....................	25 00
	$10 00

Ten dollars balance, with 15 turkies on hand. P. *Sennett, N. Y.*

Letters from the Sandwich Islands.---No. 1.

Honolula, Oahii, March 5th, 1852.

L. TUCKER, ESQ.—The Hawaiian Islands are interesting to the agricultural as well as to the commercial community of the United States, and as communications relative to the agriculture of these islands do not often reach your publications, a letter from a farmer may be acceptable. A residence of nearly a year on Oahii, and intercourse with individuals of long experience from all of the islands, have given me the opportunity of obtaining a general knowledge of the state and prospects of agriculture in the group.

The Islands, as is generally known, are of volcanic origin, and the surface of the country is for the greater part mountainous. Many of the mountains are precipitous and inaccessible, while others, attaining to the elevation of from 8,000 to 14,000 feet, present thousands of acres of highly fertile land on their sides, with a very gradual slope. On the windward side of the islands, which is visited by the greatest amount of rain, the mountain sides are generally wooded; but on the leeward in many sections the sides are barren, or slightly covered with grass. The mountains are all more or less cut up with deep ravines, which constitute an obstacle to traveling with wheeled vehicles. The elevated lands, at the height of from 3,000 to 4,000 feet, are the most favorable for raising the productions of temperate countries; the different grains, at this elevation, thrive well. While far above, the summits are white with snow, the productions of the temperate and tropical regions are within a few hours ride of each other, many hundred feet below. Although generally mountainous, yet there are many level tracts; plains from 15 to 20 miles in length and from 8 to 20 in breadth. Where these are well watered, they are the most fertile sections of the land; but often the lack of water will not admit of their being thickly populated.

The climate is salubrious, and different degrees of temperature can be enjoyed by change of locality. On the coast, the thermometer generally ranges from 70° to 80°, and its variation is rarely more than 12°. The trade wind, which most constantly prevails, renders the heat less oppressive. The nights are cool and favorable for sleep.

Our seasons are the wet and dry. The annual rains commence usually in October or November, and until April, an uncertainty prevails as to the weather, although many weeks often pass during this time without a shower. During this period vegetation of every kind takes a renewed start, and the face of the country is clothed in green. The planting season commences with the rains. Generally, but one crop can be depended on during the year, without the aid of irrigation. At the season of the rains, a crop of potatoes, melons and squashes may be produced from almost any locality accessible; but after the dry season sets in, the earth becomes parched and dry, and in many places wide cracks are formed and vegetation withers.

The soil of the group is formed chiefly of decomposed lava, and it is supposed that it will improve in quality as time causes its more perfect decomposition. There are belts of land on mountains which seem to be the decomposed ashes from some remote volcanic eruption; the soil is very light and a staff may be easily thrust to the depth of two or three feet beneath the surface; such soil is in the highest degree fertile.

Although the soil is much of it rich, yet there are many obstacles which the farmer is obliged to encounter, which are in a high degree discouraging, and which will require no small amount of patience and expense to overcome. At the season of planting or shortly after, innumerable worms are hatched, and covering the ground they destroy fields of tender plants; the grass is devoured, and the country looks blighted. The rains which start vegetation, also start the worms, which are a species of caterpillar. The attempt to grow peas, and some other American garden vegetables has, almost invariably proved a failure, and old residents no longer attempt to cultivate them. The present year, within my own observation, fine fields of corn have been cut off, to the discouragement and the loss of the owners, who consider it too late to plant again.

These Islands seem to be more particularly adapted to the growth of sugar cane and coffee. These two productions will eventually be our staples. The worms do not annoy these, or at least do not destroy them.

Sugar mills, on an extensive scale, are established on various islands, and coffee plantations are also existing. The chief drawback to the success of these two branches is the scarcity of laborers, and the high rates which are demanded by the Islanders for their services. These will in time be obviated, as the planters and others are introducing Coolies from China. When we can obtain laborers at reasonable compensation, we shall then be able to compete with sugar-growers in Manilla and elsewhere, whose productions now glut the market of California. The last year thousands of pounds of coffee were lost on plantations for want of hands to pick it; and many sugar plantations have been obliged to suspend operations on account of this circumstance combined with the depression of the market. The quality of sugar here has recently been much improved by the introduction of machinery for drying and refining it. The "Centrifugal Sugar Drainer" now performs the work in two or three minutes, which by the former method of exposure to the sun took several days. The sugar is removed from the drainer in a beautiful state of crystalization, and it is now gaining a high reputation in the California market. Those who profess to be judges of sugar, pronounce that of these islands to have more strength and to go further than the Manilla and other sugars. The quality of the coffee grown here is considered as second to none, and the future prospects for these branches of agriculture are highly flattering as the neighboring states of California and Oregon are filling up with settlers, and promise to furnish us a market.

The population of these islands is composed of the aborigines, and of emigrants from different civilized nations. The former constitute the body of the people, and are between 75 and 80 thousand in number; the latter are the chief movers in every enterprise, and number between two and three thousand. Of the foreign population, individuals from the United States constitute the greater proportion. They are chiefly engaged in trade, and reside at Honolulu; though many are scattered about on the different islands, and are engaged in planting, &c.

The natives are of an olive color, or quite similar in shade to the inside of an English walnut. Many are finely formed, and they are generally above, rather than below medium stature. The chiefs especially are men of large frame, and are occasionally seen 6½ feet in height, and in weight, upwards of three hundred pounds. As the nation has become more enlightened, many privileges have been granted to the people. Formerly they were in a state of slavery to the king and chiefs. They possessed no land of their own; but were obliged to cultivate it for their rulers. At the present time the old system has been done away with, and the natives are made possessors of land in fee simple.

Their chief production is the Kals, (*arumesculentum*,) which in the region of the coast is cultivated in patches, and requires constant irrigation. The Kals is about a year in attaining maturity. It is propagated by separating the stalks from the vegetable and planting it in the mud of the patch. This, when cooked, constitutes their chief article of diet.

The natives are making advancement in the customs and habits of civilized people. Their houses externally and internally are being modeled after the style of foreign dwellings so far as they are capable of doing it.

They are not, as a people, very industrious or enterprising; but there are some among them who, as they gain ideas of business from foreigners, put such knowledge to their own use. Imported implements, as plows, spades, shovels and hoes, are becoming quite in demand.

In the agricultural districts their chief implement in breaking up the ground as well as in cultivating the crops, is a species of spear, or an instrument similar to the spade used by whalemen.

Although their chief attention is given to the cultivation of Kals, they grow both sweet and Irish potatoes, squashes and melons. The market of Honolulu is also supplied with tomatoes, cabbages, beans, cucumbers and onions.

The manner of conveying their produce and carrying burdens, is very generally by means of a pole which they bear on their shoulders, the weight being attached to the extremities. Thus from all sections of the island, the natives may be seen on their way to market—some with a dozen or two of fowls tied at the one end of their lever and balanced by a pig at the other; other with large calabashes enclosed within nets, thus convey their Kals or fish. Donkeys and cattle are trained to carry burdens on their backs and are very serviceable in crossing precipices. I am sir, yours very truly. W. C.

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A Fine Farm.

The American Farmer contains a description of Shirley estate on James River in Virginia, containing 900 acres of cultivated land, divided into five fields, from 175 to 190 acres each. The rotations are corn, wheat, clover fallow, wheat pasture; thus affording some 360 acres for wheat. Rather hard cropping,—yet so much better than common treatment, that the fallow wheat has been estimated at 30 bushels per acre, and that on corn land 20 to 25 bushels, where once only 12 to 14 were obtained. The corn formerly yielded but five to seven barrels, now 10 to 12. One great secret of success is lime, clover, and plaster. The wheat drill and reaping machine are used; and threshing performed by mule power, at the rate of 300 bushels per day, the process of winnowing being completed in the barn basement at the same operation. Complete system and order prevails, and there is a place for every thing, and every thing in its place.

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Steam Engine for Farm Work, &c.

Eds. Cultivator—I am a young farmer, and zealous in the course of scientific agricultural improvement, in other words, I am somewhat of a "book or reading farmer,"—a class which numbers but few in this fair and beautiful region of Kentucky, where the "UNIMPROVED SYSTEM" reigns predominant, and any innovation or departure from established custom is in "horrible bad repute." To contend for the advantages of a different mode of farming, for the introduction of labor saving machines, manuring, sheltering stock, bestowing more labor on the soil, &c., is considered as quite sufficient evidence by our practical farmers, of the vain theoretical and visionary notions, which study and the perusal of agricultural journals inevitably produce. It may be well enough, they say, in the "East," but it is folly to think it would do here; and should one, "rash enough to experiment," buy a patent cob crusher, a seed drill, straw cutter, or subsoil plow, and upon trial the article itself turns out to be a bad one, unfit for the purpose for which it was designed—(as *has*, unfortunately, frequently happened with me)—he is at once laughed at, or pitied as a dupe of Yankee ingenuity and cunning.

Now I must confess, I have been somewhat humbugged in purchasing farming tools and machines, and in future I mean to be more careful, as well for the sake of my purse as the cause of improvement. In accordance with which purpose, I beg to make a few inquiries through the medium of your paper. I have heard mention made of the existence of a portable steam engine, on wheels for farming purposes, and it has occurred to me, having a great abundance of timber and wood, that I could use such a machine to great advantage, as a moving power for all the machinery on my farm. How does it answer? Is it simple in its construction, and easily managed, and what is about the cost of it, and where is it manufactured?

Can you give me some information also about corn and cob crushers—whose is the best, the largest, strongest, most durable and efficient—the best calculated for crushing our large ears of corn and in great quantity. I have one made by Beal, Lowell, Mass., which is entirely inadequate—too small. Yours, Woodford. *Versailles, Ky.*, 1852.

Hoard & Bradford, Watertown, N. Y., manufacture steam engines for farm purposes, at low prices, viz: ½ horse power for $75; 1 horse, $110; 2 horse $160; 3 horse, with cut off, $250; 4 horse with cut off, $325.

Engines for farm purposes have not been tried much in this country; and their value as compared to horses, is yet to be proved. On large farms in England, where horse-keep is dear, and coal is cheap, they are used to great advantage.

Cob-crushers are sold at Baltimore by Sinclair & Co., and by Whitman & Co., as that place is in the region of large corn and large ears, it is quite probable that they would exactly suit Kentucky cobs.

Transatlantic Exchanges of Fruits.

Exchanges of fruits, perishable and durable, between pomologists, is an old practice; but it has been mostly conducted between near neighbors only, that is those not more than five hundred, or a thousand miles at furthest, asunder. European varieties, we were compelled to fruit for ourselves, before we could get even an indistinct sight of them; we could not in the first place know any thing of their qualities as grown across the water; nor, in the next, compare their qualities as ripened there, with those matured under our own skies and sun. But the way in which the brine is now cut by steamers between the two continents, is about to remove these difficulties. The Massachusetts Horticultural Society received, last autumn, from Leroy's nursery in France, upwards of 175 varieties of fruits, including 116 of pears, 36 of apples, besides other smaller kinds. Notwithstanding their journey first to Liverpool, then to New-York, with a week's delay at the latter place before reaching Boston, a large portion of them were in perfect order for examination and comparison.

The *Beurre Rance* thus received, remarks C. M. Hovey in his Magazine, "though prematurely ripened, was one of the finest pears we have tasted, and almost or quite equal to the Winter Nelis. The specimen weighed nearly a pound, and was exceedingly fine. It scarcely seems possible that our Beurre Rance can be the same; though it is hardly possible that it should be otherwise, as it has been received from the London Horticultural Society and other sources, both in England, France, and Belgium. Mr. Thompson has described it as the "best very late pear;" and we may add, so far as this specimen would allow us to judge, that he has not overrated its excellence."

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The Curculio in Michigan.

Eds. Cultivator—I was a constant reader of the Cultivator for the first fourteen years of its existence, and I have no doubt I have lost much in being without it for the last three or four years, and intend to procure the absent volumes the first opportunity.

I propose in this communication to speak of the progress of the curculio in southern Michigan. I have been a resident of Lenawee county for the last eighteen years. The first depredations of this insect commenced about six years ago, the first season attacking a few only of our choicest plums; the succeeding year they were more numerous, and since, continuing to increase from year to year, puncturing every variety of plums, and also cherries, to considerable extent, and in some instances peaches and even apples. All reputed remedies have utterly failed to save the fruit the last season. Previous to last year, those who were careful to jar their trees daily for two or three weeks, and destroying the captured rebels, succeeded in saving a portion of their fruit. But the last season, this practice too was an entire failure; even when persevered in for months. In some sections of our country confining hogs to the plum orchard has been thought advantageous, and which has been the practice of the writer with signal success until within two years—my hogs being regularly fed under one tree, treading the ground so much as to destroy all vegetation—this tree retained its fruit until ripening, excepting last year.

The cultivators of this fruit are entirely discouraged. One object in this communication is to inquire, and if possible, to ascertain from you or any of your subscribers, through the Cultivator, if the curculio has ever been known to absent itself from any district where it has been known to be prevalent—if not, then we may as well cut down our trees at once. Before the appearance of this insect, finer plums were never grown, perhaps, than in this section, fine crops being obtained from grafting on the wild plum (Prunus americana,) in three or four years time.

Southern Michigan is well adapted to the growing of fruit, producing many of the finest varieties; and when the great chain of railroads shall be completed connecting it with New-York, you may calculate on finding an article in your markets that will not be surpassed. But enough for the present. Perhaps I may resume this subject hereafter, if agreeable. B. J. H. *Adrian, Feb.*, 1852.

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Splitting Frozen Timber—Timber Chains.

Eds. Cultivator—It is well known that timber splits freer, and with fewer splinters, when frozen, (indeed the frost alone is known to split open the largest trees;) besides the farmer is most at leisure at this season of the year, and the only difficulty is to prevent the wedges from flying out.

To avoid this, have your wedges made of iron with full corners, then, with a sharp cold-chisel, cut beards on the corners, and if your timber is not unusually tough it will not be necessary to pick up the wedge after each blow of the beetle. It is admitted that when timber is frozen, the split is more likely "to run out," but that is of little consequence for *fuel* or fencing either, where timber is plenty.

When a farmer needs a strong chain for drawing timber and rocks, he goes to the village blacksmith and pays him from twelve to seventeen cents per pound for a heavy chain, with links from three to five inches long, or perhaps he pays two or three cents per pound for a few yards of cast off cable or rigging chain. In either case, he makes a better bargain for his blacksmith than he does for himself.

A better policy is to buy at a ship furnishing store, or elsewhere, for nine cents or less per pound, from fifteen to eighteen feet of rigging chain, made of the best refined iron, of the size of 7-16 inch, then have a good hook with short shank put on each end, but don't have a swivel or any long links put in it to hook into, for they will be worse than useless, as they do not render freely through the hooks, and are more likely to break than other parts of the chain.

To "hook up," instead of the long links, some have a crotched hook to hook astride the chain, and if well made they answer a good purpose, but there is a method of tying which is nearly as good. First draw the end through the yoke ring as far as you wish to shorten, then pass it across the chain and up through the loop; then hook back around the chain, and if the shank of the hook is not too long, it will keep its place perfectly. A chain of the above description will stand almost any service, and for many farmers one made of 3/8 inch iron, will be amply sufficient and much lighter to handle. W. *Waterbury, New-Haven county, Ct., Jan.* 21, 1852.

Platanus Reviewed.

The readers of the Cultivator for April, were treated to an article claiming to be a *Review* of the "Dairyman's Manual," edited by Gurdon Evans; and were it, as pretended, a fair and candid expose of the volume in question, there would be no occasion for calling the attention of its readers to the subject a second time.

Platanus, like a surgeon well hardened by the sight of flowing blood and flayed muscles, opens the subject with a masterly *cut*. Hear him: "*Book-making* is working wonderful progress in these United States. Genuine *authorship* is quite another thing, * * and the work now presented is a genuine, unadulterated type of the *book-making* genus."

May we not suggest that a genuine review of a new book, whether meritorious or otherwise, involves a degree of responsibility to the *book-maker*, as well as to the reading public, over whose education and purses our reviewer watches with such paternal solicitude. Would not courtesy alone, dictate that the court hear the case before *judgment* is pronounced? But here the grave judge has declared the verdict even before favoring us with a single *reason*. Thus the reader is *prepared* for a hearing of the subject. One can but remark a degree of acerbity in Platanus' whole manner and tone, that forcibly reminds the reader of the mastiff in the old fable; for he cannot speak of the "clear large type, good print, and good paper," all of which he places to the book-maker's credit, without almost complaining of it. In such a review, one cannot fail to see its author, (in imagination, at least,) rise late in the morning, throw off his night-cap, and without washing his face, seize his pen, and wreak his vengeance upon some imagined insult received late the evening previous, by dashing off a hasty review of some half-read, luckless author. Woe to the victim!

Platanus, in his review, is vulnerable either to the charge of *wilful misrepresentation*, or of an *unpardonable degree of ignorance* upon subjects where much pretended wisdom is displayed.

This charge I propose to substantiate. In the first place, he promises to deal with the book-maker candidly; how candidly we shall see.

Next, Mr. Platanus turns up his nose at the idea suggested near the close of the third chapter, relative to improving the present race of cows, by rearing calves from the best milkers only, both male and female. This every man of sense must know is the only *practical* mode of generally improving dairy stock at present, for the supply of Short-horns, or other pure blood animals approved for the dairy, is by far too limited to furnish a tithe of the stock, if such alone are to be used. Now which is the wisest course—to persist in milking indiscriminately eveay heifer, no matter how poor, till a supply of improved animals can be produced, or may we have the privilege of selecting?

Particular attention is called to the fact, that certain extracts from the "Encyclopedia of Geography," are *acknowledged*, leading the reader to infer that *other* extracts and quotations are *not* acknowledged—when the truth is, all the borrowed matter in the work is particularly acknowledged, either by references or points, and generally in the preface. To allow such an inference, is *unjust* and *libelous*.

He says Chapter IV "opens rich," on the history of *improved Short-horns*. Now I wish the reader would examine his comments on this subject before proceeding any farther, (as in this appears to rest the burden of his message,) and then compare the language quoted from the "Manual," with Youatt's history of this fine race of cattle, given on page 229 of his "Treatise on Cattle." After giving a history of the bull Hubback, he says: "It has been remarked that we have at present no superior horses on the turf which do not boast the blood of the Godolphin Arabian; so it may be asserted that we have no superior Short-horns which do not claim descent nearly or remotely, from Hubback." Then in a note he adds: "This is true, because Hubback was the sire of the dam of Mr. Charles Colling's bull Fojambe, who was the grandsire of Favorite, and there can be no doubt that there has not been for many years, any superior Short-horn who has not descended from Favorite." So the matter must be left between Platanus and Youatt; and if Platanus is interested in any family of Short-horns not descended from Hubback, Mr. Youatt would not pronounce them "superior." Who is the best prepared to judge of these matters? An American, (for I suppose Platanus is one,) or an Englishman like Youatt, who has spent his life among the improved Short-horns.

In relation to the Galloway cow referred to, Youatt says: "Mr. Colling's Short-horn bull Bolingbroke, (a descendant of Hubback,) was put to a beautiful red-polled Galloway cow, and the product being a bull calf, was in due time put to Johanna, a pure Short-horn. She also produced a bull calf. This grandson of Bolingbroke, was the sire of the cow Lady, by another Short-horn dam, and from Lady has sprung the highly valuable family termed in reproach the Alloy. How far the alloy was derogatory, let facts testify." Then comes the bill of sales made by Mr. Charles Colling in 1810, ranging for cows, from $175 to $2,000—for bulls, from $275 to $5,000—for bull calves, from $75 to $750, and so on. I can only wish that there was space to extend the interesting quotations from Yonatt.

The reader will see where the quarrel lies, and I more than half suspect that the "Manual" has been transformed from a "well printed volume," to a *hobby-horse*.

The book-maker is next reprimanded for once using the term Devon*shire* instead of *Devon*. This does appear like a *small bite*, scarcely a *nibble*, yet let us call up the shades of Youatt again. From page 14 to 20, this great author, (I suppose *he* may be called,) has fallen into the same blunder no less than *ten* times. Is this ignorance in Platanus, or malice prepense?

In relation to Devon cows, there is either a wilful misrepresentation, or gross ignorance displayed. Platanus makes the Manual read, "The author puts them down as *no* milkers, and consequently in their high blood, unfit for the dairy." Now if you ever buy one of these books, (for they are made to sell!!) you will find it to read thus—"But for the dairy the pure Devon can boast but few excellencies; the principal are their hardiness and the *richness* of their milk. Yet some crosses with our native breeds have produced the best of milkers, both by quality and quantity. Undoubtedly dairymen located in cold, elevated, and less fertile regions, will find this race of cows, or judicious grades of natives and Devons, a more profitable stock than the Short-horns." How much more magnanimous it would be in a reviewer to have said nothing about this matter, or else given his readers a short extract, which would give all a just idea of the subject.

Of Devons for the dairy, Youatt says, page 20—"for the Dairy, the North Devons must be acknowleded to be inferior to several other breeds. Their milk is good, and yields more than an average proportion of cream and butter, but it is deficient in quantity. There are those, however, and no mean judges, who deny this, and select the North Devons even for the Dairy." How much does this differ in import from the paragraph quoted from the "Manual," and who can be expected to be a better judge in this matter than Youatt?

From what is said abont *breeding* for the dairy, the readers of Platanus would get an idea that the introduction of Short-horn blood, by the use of such bulls with the native cows, was entirely overlooked or discarded by the author of the Manual. The fact is, more than half the chapter devoted to this subject, is upon the very subject of recommending such crosses, containing many evidences, both from American and European dairymen, in favor of Short-horn grade heifers for the dairy. Yet our reviewer has argued the subject as though it was an idea entirely new, both to the author and readers of the review. What can be more unjust in a reviewer, than a course like this? One short extract may serve to convince the reader of Platanus' implied libel. He speaks wisely of the pedigree of the "Creampots." What says the Manual on the same subject, page 37—"There can be no doubt that Cœlebs, a grandson of Mr. Colling's bull Comet, caused a great improvement in the stock of Massachusetts, and other sections, where his progeny were introduced. The variety to which Col. Jaques gives the name of the "Creampot breed," originated from a cross with Cœlebs, with two remarkable cows selected from what is called the native stock of the country." Did Platanus borrow his favorite idea from the book he so cordially condemns, or has he Short-horn bulls to sell?

Next, the book-maker is very politely supposed not to appreciate the importance of something that Johnston, Sprengel, or somebody else, has written on the subject of milk, &c., because, forsooth, it was not all put into the book!

Chapter VIII. he says "is all very well," &c. When I came to this, it did appear as though Platanus was getting better natured, but, alas! the "poetry" quoted, offended his taste, and the next two chapters are attacked with a vengeance.

He says these are made up of extracts, "chiefly from the New-York State Agricultural Society," and adds, "although a considerable amount of detached information is given, it is not of a kind to instruct dairymen in the detail, or in the successful prosecution of his business." It is true that these two chapters contain copious extracts from this very reliable source, but it is not true that they are *made up* of extracts from any one or more sources. On the contrary, such practical suggestions are interspersed as long observation has shown necessary to the successful manufacture of cheese and butter. What a pity it is though, that the State Society have spent so much time and money, to disseminate information, so worthless to the American dairyman?

But seriously, who is best prepared to judge of the character and merits of this part of the "manual," Platanus, or practical dairymen of unquestionable skill in their business? Hear what Alonzo L. Fish, Esq., of Litchfield, Herkimer co., says of it:—"I am convinced from a perusal of Mr. Evans' work, that the special aim of the author is to give practical value to its contents, and well has he succeeded in his object. There are many articles in the work, each of which is of far more value to the dairyman or grazier, than the price of the work, and no family that has the use of one cow, should be without one. Alonzo L. Fish. *Litchfield, Sept.* 8, 1851."

Mr. Fish is too well known, both at home and abroad, as a successful dairyman, to require any comments on his opinions.

Here is the opinion of Abraham Hall, Esq., of Floyd, Oneida co., well and widely known as a dairyman:

"From an examination of Mr. Evans' work on cheese making, &c., I firmly believe it to be a valuable treatise, giving information in every particular, so that a person scarcely can fail of making a good cheese who studies it attentively. Likewise some valuable advice as to selecting and raising cows for the dairy, diseases, &c. Abraham Hall. *Floyd, Oct.* 4, 1851."

The extracts from Youatt on diseases, our reviewer would prefer to leave in the English book. So would the book-maker, if it were accessible to the American dairymen generally; but as it is not, except at an exorbitant price, it was thought advisable by dairymen and others to devote a little space to *diseases.*

The apologies at the close are as well appreciated as the *ability* of the book-maker will permit.

The work is sold by agents who will find it a ready sale; a few more active responsible agents will be employed on favorable terms; address the author at Whitesboro, Oneida co., N. Y. Gurdon Evans.

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Dried Fruit.—Horace Greely, in his letters from Paris, expresses the opinion that nicely prepared dried peaches would find a ready sale in London and other markets, if pains were taken to introduce the article to public notice. May we not reasonably believe that an enormous business is yet to open to this country, in the form of the culture and skilful drying the very best fruits for exportation, their weight being thus so greatly reduced as to render the cost of transportation to a comparatively small sum?

Necessity for Ventilation.

Eds. Cultivator—The proper ventilation of dwelling houses is, I think, too generally regarded with little attention; and from reading the recommendation of your correspondent, I determined to state a few facts on the subject.

"A person inhales 300 cubic feet of air in 24 hours. The inhaled air should contain one-fifth oxyen. At every inhalation a portion of the oxygen penetrates the vascular membrane (of the lungs,) and unites with the blood, which, at the same time, emits a certain amount of carbonic acid gas, which unfits the air to be respired a second time.

"There is passing from the skin and the lungs, more than two pounds of waste matter in 24 hours. This is diffused through the air in the room, and if this impure air be not changed, it will be inhaled into the lungs.

"Let the air become vitiated, whether from the abstraction of oxygen, an excess of carbonic acid gas, or the exhalations of the lungs and skin, and it will have a deleterious effect on the system, by rendering the circulating fluid, (blood,) impure. For this reason, in workshops, churches, and dwelling-houses, pure air should be admitted freely and constantly, and the impure and vitiated air permitted to escape. This is of more importance than the warming of houses. We can compensate for the deficiency of a stove, by an extra garment, or an increased quantity of food; but neither garment, exercise nor food, will compensate for pure air.

"Above all, the sleeping rooms should be so ventilated that the air in the morning will be as pure as when retiring to rest in the evening. Ventilation of the room would prevent morning headaches, and the want of appetite, so common to the feeble.

"*Every* room should be so constructed that pure air can be admitted freely, as impure air tends to weaken and destroy the system. The impure air of sleeping-rooms is probably more ruinous than intemperance. Look around the country, and those who are most exposed, who live in huts but little superior to the sheds that shelter the farmer's flocks, are found to be most healthy and robust."

I have extracted thus largely from Calvin Cutter, M. D., because he is authority of so high character, that no one can gainsay.

What shall we then say to our friend J.'s, and all similar plans, for shutting out heaven's choicest blessing from our homes.

Nature has built a fire in our own bosoms sufficient to keep us "warm and comfortable," if we dot stifle it. Oxygen is the supporter of combustion; and when we inhale pure air, the same chemical process is going on in our lungs, that is taking place in a stove to generate heat. And farther, the same oxygen from the air which unites with the blood, thus generating heat, is carried by the blood to every point of the system, uniting again with other materials, to form the various tissues of the body, thus creating heat at every point.

The man that passes half of the time in exercise in the open air, may, perhaps, endure such comfort; but how can we expect women and children to live in hot and vitiated air. All know that warm air becomes rarified, so that the woman whose chest is contracted to two-thirds, or one-half its natural size, will receive but a small share of the oxygen nature has intended for her use. J. L. Pope. *Manlius, March* 23, 1852.

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Dean Swift said with much truth, "It is useless to attempt to reason a man out of a thing he never was reasoned into." The best argument will be thrown away upon a fool.

Stretching Wire Fence.

We have, for more than ten years, experimented with wire fences. Some of the experiments were failures, and a few were successful. A difference of opinion exists as to their real value; and like everything else which has not been fully submitted to the test of experience, this difference will continue for some years to come, till extensive actual trial shall decide the point for all. Our object is not, at present, to discuss this matter, but merely to explain the best modes of stretching the wires, as on this depends essentially the success of the fence, and many have found much difficulty in this respect.

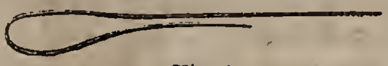
Fig. 1.

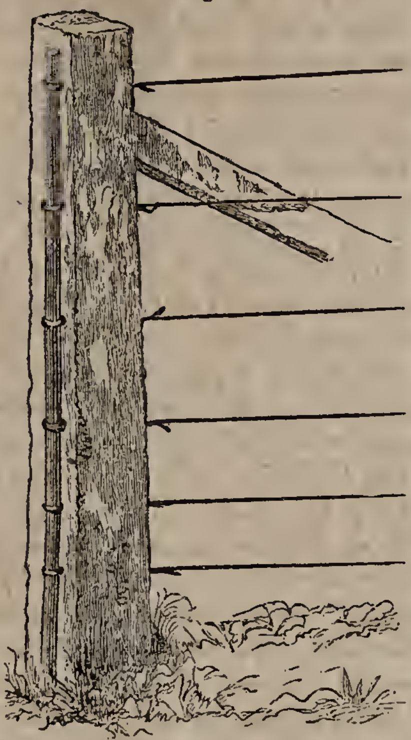
Fig. 2.

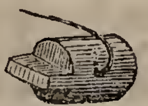
Fig. 3.

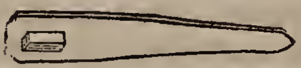
Fig. 4.

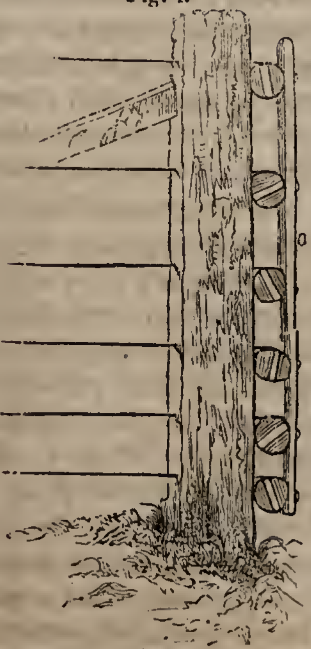
Fig 5.

The general practice now is, to set and brace firmly, two large posts, some hundreds of feet asunder, between which the wires are tightly drawn, the smaller intermediate posts serving only to keep tkem in their proper position. The first thing, therefore, is to secure one end of each wire to the first post. This we have found most easily and perfectly effected, as follows: Bore holes through the posts at the several heights required for the wire, and in the direction they are to pass, these holes being about twice the diameter of the wire. Next procure a strong wooden rod, about an inch or an inch and a half in diameter, with a length equal to the height of the fence. Pass each end of the wire through the post, and then bend the end into a loop, like that shown in Fig. 1. Next pass the rod through each loop, and bringing it up vertically to the side of the post, let the wires be forcibly drawn against it. In this way each end passes round the rod, and then returns through the post, Fig. 2. It will thus sustain any required degree of tension.

The other ends are to be passed through holes in the other large post, of just sufficient size to admit their passage, and a few of the intermediate posts placed between, to which the wires are to be loosely stapled, and then the main process commences, of stretching them. This may be effected in two different ways, which we shall proceed to describe.

The most simple and cheap mode is, first, to saw off from a round stick, 3 or 4 inches in diameter, small pieces or rollers, about 7 or 8 inches long; and then by sawing in an inch on each side, and splitting off with an axe, to form a tenon on each of these rollers. A hole is then bored with a gimlet into their sides, and one inch of the end of the wire, bent at right angles, is driven into this hole, to prevent the wire from slipping as the roller is turned—Fig. 3. The wooden wrench, Fig. 4., is then applied to the roller, and turned till the wire is tightly drawn, when the board *a*, Fig. 5, is nailed to the roller to prevent its moving. Each is thus successively treated, till all the wires of the fence are sufficiently tightened.

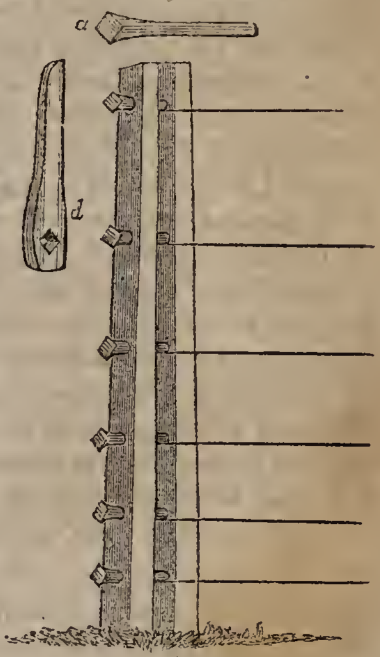

Fig. 6.

A more perfect and substantial method is shown in Fig. 6, (the brace being omitted,) where two posts are placed about two inches apart, and two-inch augur holes bored through both, to receive the rollers for the wires. These rollers are made of pieces two inches square, (*a*) dressed round, with a small portion left square at one end.—These are inserted into the augur holes, the wires attached to them by gimlet holes, and they are turned by means of the wrench *d*, till the wires are firmly stretched. Then, while the wrench is still attached to them, each is successively driven in with an axe, till the square corners prevent them from turning. The wires may be easily, and at any time, slackened or made tight, by driving these pin rollers back again, and applying the wrench. The expansion and contraction, between the severest cold of winter, and the greatest heat of summer, is about one inch in a hundred feet.

One great cause of failure in wire fences, ir poor wire. We have found that a smart animal could not break the best No. 7 telegraph annealed wire, while one three times as large, of poorer materials, was snapped like burnt flax, by a bullock dashing against it.

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Hen-roosts in connection with Horse-stables.—The practice of allowing fowls to roost in the same apartment with horses, though followed by some farmers, out to be discountenanced. Albert Todd, of Smithfield, R. I., states in the *Rural New-Yorker*, that he had a horse become covered with "hen-lice" from fowls roosting near the stall. The animal was seriously injured before the cause of the trouble was ascertained. He rubbed out his main and tail, and was continually biting himself, to obtain relief from the irritation which the vermin produced. The lice may be killed by tobacco water, sulphur, or oil.

Sheep Husbandry on the Prairies.

Can Sheep Husbandry be successfully and profitably prosecuted, on the Prairies of Illinois, Iowa, and the bordering States and Territories?

Eds. Cultivator—So little has yet been successfully done on the western prairies, in the production of wool, that the discussion of the subject through the columns of the Cultivator, might doubtless be interesting and profitable to many of its readers. It certainly does not require the power of prophecying, to determine the ultimate destiny of the west. As an agricultural country the upper Mississippi valley must shortly stand at the head of all other portions of the Union, if quality, quantity, and cheapness of production, be the standard for deciding this matter. This may be said without disparagement to any other section of the country, and the most favored spots in New-York and Ohio; although beyond doubt; possessing many advantages and charms, and to a certain extent vastly productive in everything that would indicate a high state of civilization and power; yet when compared to the mighty natural elements of production of *the far west*, they become immeasurably insignificant! To no branch of husbandry are the high rolling prairies of the west, better adapted than for the grazing of sheep. Although it is a subject so fertile in interest and importance, that a volume might be written upon it, yet the few ideas, facts, and deductions therefrom, that may be condensed within the limits of two pages of this magazine, will be none the less interesting to those who desire to become acquainted with the natural resources of the west, and especially with the interesting subject under notice.

Sheep, in no portion of the hilly regions of New England, uniformly enjoy better health, nor produce a finer, stronger, and fairer sample of wool, than on the dry rolling prairies of Illinois and Iowa. The comparative cost of production, may be somewhat conjectured, from the relative cost of land, the character of the herbage, and the facilities for transporting the article to market. The most extensive sheep ranges east of the Alleghany Mountains, are valued at from $20 to $40 per acre; and the natural herbage on this expensive land, in an average of seasons, will not sustain more than *five sheep* per acre, in a good healthy condition. This is by far too high an estimate, but for argument sake it will be allowed. If the artificial grasses be cultivated, and gypsum and other stimulating manures be employed, *seven full grown sheep* per acre, may be carried through the spring, summer, and autumn seasons, by having small enclosures, and frequently changing the flocks from one field to another. Neither of these results can be attained on any other than the very best quantity of land, and will require very careful attention on the part of the owner or manager of the flock. With the present extraordinary high prices, no branch of farming pays so well, on moderately high priced land, as wool and mutton. It is not probable that those prices can long be sustained, neither, on the other hand, need there be anticipated a ruinous depression in the wool markets of the union, from the fact that the demand will increase with the increased production of the article. It may be well, however, for the farmers, who are directly interested in this business, to keep well posted up on the great leading features, which in future years will govern the American wool markets.

As an hypothesis to base a few arguments and conclusions, we shall suppose a point below which the eastern wool grower could not reach, without entailing loss and ruin. This standard need not be lower than 25 cents per pound for fine wool, and 20 cents per pound for the long coarse staples. Admitting this position, we shall presently prove that those prices will afford as high a profit to the prairie farmer as is now obtained for wool, by those who employ high priced lands, and that too of an inferior quality, for the production of a rich indigenous herbage.

For many years to come there is no necessity for the owner of a flock of sheep, in either Illinois, Iowa, Southern Minnesota and Wisconsin, to invest a cent of money in the purchase of lands for the pasturage of sheep. *The open prairie, of a suitable quality for the business, is sufficiently abundant to stock all the sheep in the union, within the limits of either of the states of Illinois and Iowa.* The latter state is more especially adapted for sheep husbandry than Illinois, on account of the high rolling character of the prairies, and the total absence of swamps, marshes, and low unproductive wet lands. This feature applies to the whole state, whereas in Illinois, it is confined to about one-third of its area. The argument still holds good, that the entire flocks of the union may be driven on to the prairies with impunity, and be fed at the *public crib*, for an almost indefinite period of years, without costing a cent per head, excepting the supervision of the shepherd. A very important feature connected with the pasturage of extensive flocks of sheep on an open prairie country, might be overlooked by a merely casual observer. The coarse natural grasses which are very abundant in variety, as the land becomes closely pastured, give way for those of a finer and more delicate quality, and the sheep selecting the finer kinds in preference, head this species of herbage down so close, that it constantly thickens on the surface of the ground, and thus crowds out and destroys the coarser and rejected varieties. By this process and other influences favoring the eradication of the wild and coarse grasses, such as mowing for prairie hay and burning the surface by fires, the ground becomes closely matted with a rank growth of white clover, and the finest qualities of May and June grasses, which afford a richer and more appropriate description of pasturage, than can be met with in any other country of which we have knowledge.

The white clover does not appear to be so natural to those localities where the subsoil is loose and sandy, as upon those of a more retentive nature; but by far the largest portion of the dry prairies favor its growth to a much greater degree than the soils of any other portion of this continent, with which we have become acquainted; and this plant, in connection with several other domesticated grasses, affords a rich and abundant pasturage, especially adapted for sheep, such as no where else can be found. Aside from the natural tendency of the soil for the production of the most delicate and nutritious varieties of grasses, it has a never failing supply of the numerous species of prairie grasses which all more or less appropriate for the grazing of sheep. The grass that springs up directly after the burning of the prairies, is prefered above all others by stock of all kinds, and even a young tender growth of timothy and herdsgrass would be rejected by all kinds of domestic animals, and the prairie grass would be eaten in preference. This is precisely the case in the spring and early summer months, and so passionately fond are sheep and other stock of the coarse prairie herbage, that large plots of ground completely covered with herds grass have been known to remain untouched by stock, during the whole of the early part of summer, and the wild grasses immediately adjoining them have been closely grazed by the animals roaming at will over the prairies. It is proper, however, to add that by the months of July and August, the herds grass is preferred, and by the setting in of winter it becomes closely eaten to the ground, unless fires had been allowed to pass over the prairies, in the early part of autumn, in which case the young prairie grass would be again prefered.

Where sheep husbandry is engaged in on an extensive scale, there are many things deserving attention; and those who may attempt it, would do well to give the whole matter a minute examination before making a heavy expenditure of this kind. So far as the pasturage of sheep is concerned their need be no misapprehensions on that score. The sheep will get uncommonly fat, so much so that whole flocks will be fit for market, by the month of November, and that too by grazing upon the open prairies. But when the business of wintering them is duly considered, a serious drawback upon the profits of the operation is presented. Prairie hay is at the best, a very doubtful description of provender to successfully carry a flock of sheep through an Illinois or Iowa winter. The article itself is too barren in saccharine and mucillagineous matter, to be an appropriate food for wintering sheep; and besides its natural coarse and harsh character adapts it better for the wintering of horses and horned cattle, than for the more delicately formed sheep. In short no one need attempt wintering sheep on prairie hay alone, and it would be decidedly preferable to reject it entirely, and provide a quality of winter provender suited to the wants and habits of those animals.

Well cured timothy, red clover, and herdsgrass hay, are among the cheapest articles that can be provided for the wintering of sheep. Two tons per acre may to a certainty be obtained of either of those grasses, in an average of seasons, and by good management, three tons per acre will more frequently be had than a less quantity. Mowing machines of the most perfect and reliable character may be had for $150, that will mow grass in as perfect a manner as can be done by the common scythe, and at one third the cost; which in connection with the use of a revolving horse rake, and also the cheapness of the land, will reduce the actual cost of the hay so low, that the expense of wintering the sheep, after all, will be nominal, compared with the cost in the New England states. Where clover culture is adopted to any considerable extent, a very abundant supply of wholesome winter food for sheep may be had, by allowing the whole of the second crop to remain on the ground undisturbed by stock, commencing with the month of August and ending with October. During those three months a full average crop will cover the ground, and during the periods that the surface of the land is either frozen or dry, the flocks may roam at pleasure over the clover fields, and the additional food they will require will be merely nominal, and the actual cost of such pasturage will be made good, by the superior condition the land will be in for the succeeding crop. Hay and winter pasturage combined, even under the most favorable circumstances, are not sufficient to carry sheep through a four month winter in as good condition, as they were in autumn; and nothing short of this result should satisfy a provident husbandman. The cultivation of oats and root crops, may be economically prosecuted in a prairie country, in connection with the rearing and feeding of sheep; and no one should attempt the business, unless he be well prepared to provide his flocks with a liberal supply of water, food and shelter, to protect them from the chilly blasts of winds, rain, and snow storms that frequently occur on an unprotected prairie country.

A mere casual observer can form no conception of the capacity of the great western prairies, for the rearing and feeding of sheep, and all other domestic animals. It requires a personal inspection, and a free and liberal intercourse with the practical farmers, and a careful inspection of their flocks, and their modes of managing them, to determine correctly of the applicability of the country for this or any other pursuit. The unimproved soil suited for the purpose is so abundant that it would be unwise to purchase it for summer ranges for sheep, but for wintering the flocks provision must be made from the uncultivated enclosed grounds. At the head of all the large streams, small spring streams, are abundant and the land invariably in those sections lies high and dry possessing a soil of some eighteen inches in depth, that cannot be surpassed for the production of rich herbage, either natural or artificial. W. G. Edmundson. *Keokuk, Iowa.*

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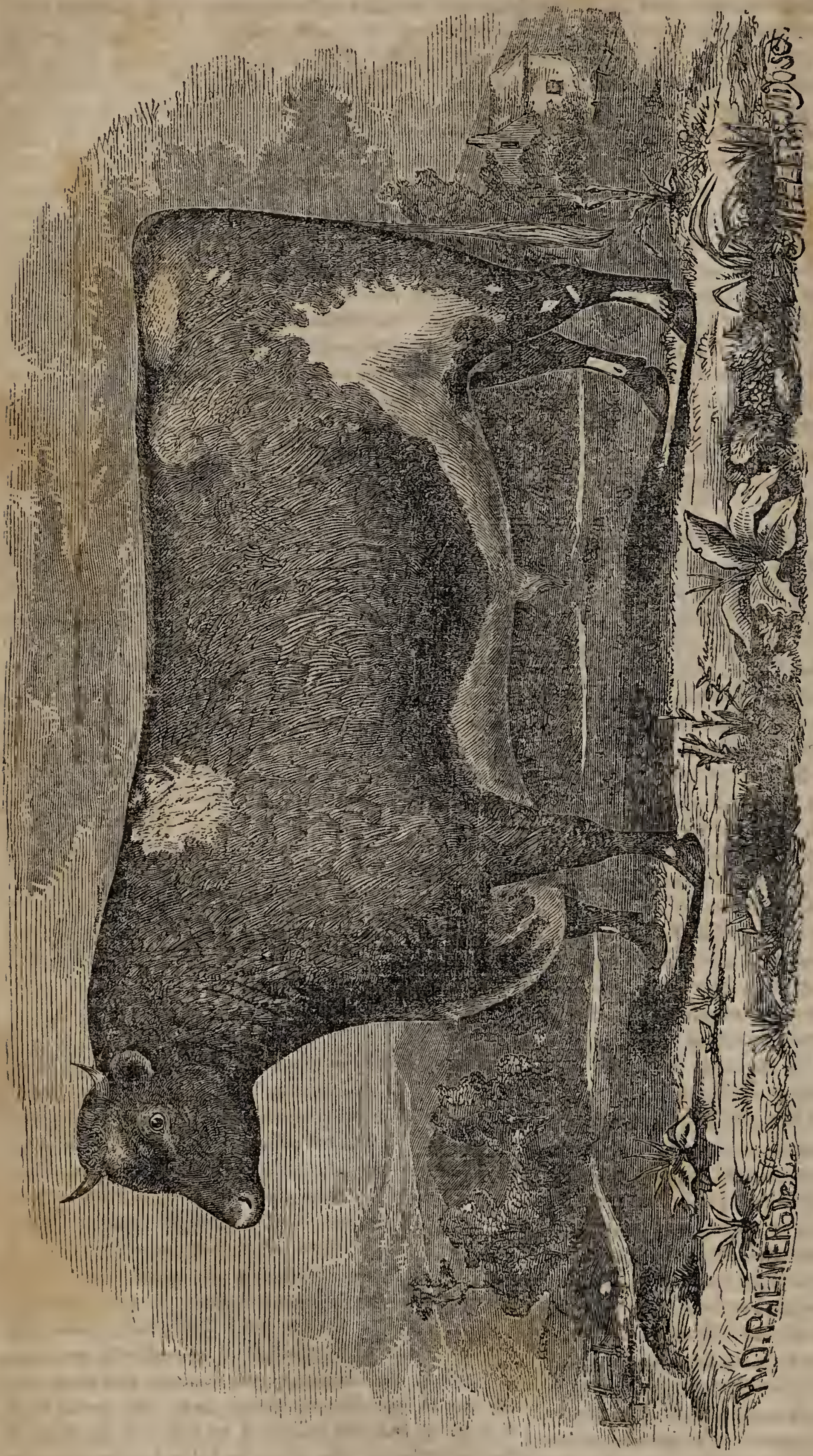
Errors in Practice.

Messrs. Editors—In the last Cultitivator, is a letter from Prof. J. P. Norton, relating to the manner in which cattle are wintered in some of the towns in this valley, and I am not disposed to contradict a single word he has said; this unfarmer-like course has always been practiced by some who are called large farmers in this vicinity. A portion of the present farming population, and their ancestors before them, have forever acted upon the principle of the man who carried the stone to mill in one end of the bag, to balance the grist across his horse's back, viz: "it was right, for his father had always done so," and this principle is remarkably prevalent throughout New-England; and nowhere is it more visible than at New-Haven, directly under the eye of Prof. N. himself, and still unnoticed by him. In the days of the revolutionary war, it was probably good economy for the farmers along the sea-board to obtain salt hay for their cattle; but now, when salt itself, is bought at thirty to forty cents per bushel, the farmers still adhere to that old and expensive practice. They all admit that the hay without the salt is almost valueless. Will Professor N. please call the attention of his neighboring farmers to this matter. A Subscriber. *Valley of the Housatonic River, April* 12, 1852.


P. D. PALMER Del.

S. P. Chapman's Short-horn Bull "Halton,"

Awarded the first prize by the New-York State Agricultural Society, at Rochester, in 1851, in Class of "Foreign Stock," being then owned and exhibited by the Hon. Adam Fergusson, of Woodhill, Waterdown C. W.

Mr. Chapman's Bull Halton.

L. TUCKER, Esq.—In presenting you and your readers with a portrait of "Halton," allow me to give also his pedigree.

His color is a beautiful red roan. He was bred by GEO. VAIL Esq., of Troy, N. Y.; calved the 20th August, 1847; got by Meteor, 104*—dam [Lady Barring-

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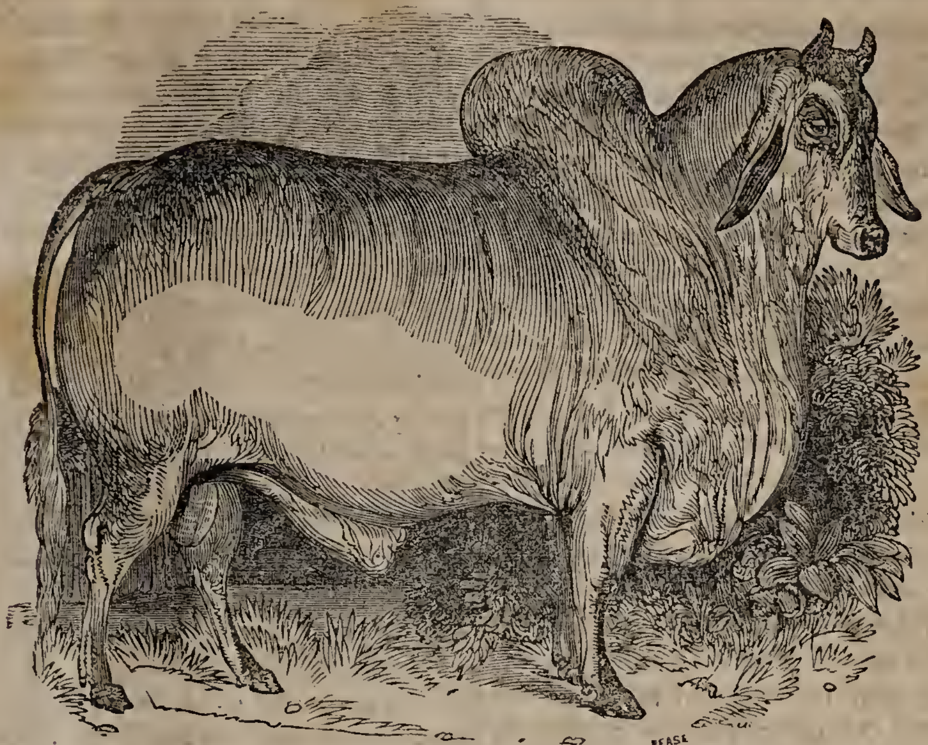
* Meteor was awarded the first prize at the fair of the American Institute in 1843, as the *best bull of any age*. In 1844, he was awarded the first prize by the New-York State Agricultural Society, as the *best bull of any breed;* and also the first prize as the best Durham bull. He also won at the Rensselaer county fair.



Nagore Bull.

This belongs to the bumped or zebu division of the ox tribe. It is a native of the southern part of Asia. The Bulls are very active—are broken to harness, and are ridden like horses. It is said they will travel sixty miles a day, with a man on their back. A few, as objects of curiosity, have been introduced into this country, and shown in menageries.

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ton III*] by Cleveland Lad, (3.407)—grand dam [Lady Barrington II] by Belvidere, (1.706)—gr. g. d. [Lady Barrington] by a son of Mr. Mason's Herdman, (304)—gr. gr. g. d. [Young Alicia] by Wonderful, (700)—gr. gr. gr. g. d. [Old Alicia] by Alfred, (23)—gr. gr. gr. gr g. d. by Young Favorite, son of Favorite, (252.)

Meteor, the sire of Halton, was by Duke of Wellington, 55, (3.654;) dam [Duchess] by Mr. Bates' celebrated prize bull, Duke of Northumberland, (1,940,) &c. &c.

Lady Barrington III, Duchess, and Duke of Wellington, 55, (3.654) were bred by the late Thomas Bates Esq., of Kirkleavington, Yorkshire, England, and imported by Mr. Vail. It will be seen, therefore, that Halton is descended *directly* from the justly celebrated Bates stock.

Speaking of the Barrington family, Mr. Robert Bell, the friend and tenant of the late Thomas Bates, Esq., remarks,—"I have no hesitation in saying that there is not a better tribe of cattle in England than the Barringtons. I have had several applications for the old cow, [Lady Barrington,] lately, although she is 16 or 17 years old; but I would not sell her, intending to keep her as long as she will breed. * * I have now a heifer, from a daughter of your Lady Barrington III, by 4th Duke of York, [the sire of Mr. Vail's imported heifer "Yarm Lass," S. P. C.,] not yet a year old, for which I would not take less than 100 guineas, ($500.) The *reason* why I think so much of the Barringtons is, *they have plenty of hair, are good handlers, and most excellent milkers,* qualities that many Short-horns do not possess." Mr. Vail, in a letter to me of the 19th August, 1851, follows this extract by saying, "I have now four cows and heifers of this tribe. My three which give milk, *are all good milkers,* which corresponds with what Mr. Bell says about this family of Short-horns." Very respectfully yours, S. P. Chapman. *Mt. Pleasant Farm, Clockville, Madison co., N. Y., May,* 1852.

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Reviewer Reviewed.

A review, by "Platanus," of Mr. Evan's *Dairy Manual*, appeared in *The Cultivator* for April. It is not my intention to defend Mr. Evans' book, but whatever are its errors, they cannot be corrected by opposing them with others. Neither have I any disposition to revive a controversy in regard to the origin of certain stocks of cattle, but lest some of the statements in the review alluded to, should be deemed unanswerable, I offer a few remarks.

1. It is said in the review, that the bull Hubback was, "according to the best investigation, a thorough-bred Short-horn."

It is well known that there was formerly much discussion in regard to the blood of this animal, and that it has been left in doubt by persons who have had the best opportunities to obtain information on the subject. It is true that *forty-five years* after Hubback was produced, a pedigree was obtained for him, which was placed in the Herd-Book. Admitting, for the present, that the pedigree is correct, it does not prove that Hubback was a "thorough-bred Short-horn." It shows that he was derived in part from the stocks of Sir James Penniman and Sir Wm. St. Quintin, and there is plenty of evidence that these were not deemed pure Short-horns,—they having been mixed, more or less, with Norman blood. Even Ambrose Stevens,—to whom the writer of the review will not, probably, object as authority,—has said (at least by implication) that those stocks came from Normandy! (See his article on the "history" of Short-horns, in the *Trans. of the N. Y. State Ag. Soc.*, 1849.)

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* Lady Barrington III, won the first prize at the show of the New-York State Agricultural Society, held at Auburn in 1846, and the first prize at the Rensselaer county fair same year.

2. It is said "Mr. Colling never ascertained the great value" of Hubback "till after he had parted with him."

It appears that Chas. Colling bought this animal of his brother Robert and Mr. Waistell, they having become joint owners of him not long before. Mr. John Hutchinson, in a letter to the *Farmer's Journal*, says Mr. Robt. Colling had "declared his opinion" that Hubback was not a good bull and that, consequently, he was sold to Mr. Chas. Colling for eight guineas—*two guineas less* than Messrs. R. C. and Waistell gave for him. As soon, however, as he came into the possession of Mr. Chas. Colling he was not allowed to serve cows—not even those of his former owner, Mr. Waistell—for less than *five guineas each.*

Mr. Youatt, speaking of the transfer of Hubback to Chas. Colling,—who, he says, "with the quick eye of an experienced breeder, *saw the value of the little beast,*"—states that Mr. Waistell expressed to him, in 1832, (forty-nine years after the sale,) his "regret" at having been induced to part with the bull, and his "extreme disappointment" at Mr. Colling's restrictions in regard to his services.

From this evidence, is it not obvious to every unprejudiced mind, that Chas. Colling appreciated, more highly than did any other person, the value of this bull, and that he designed the exclusive use of him to his own herd, till he had secured, to the degree he wished, certain peculiar properties which he saw the animal possessed?

3. The reviewer says—"as to originating the 'improved' Short-horns, Chas. Colling had nothing more to do with it than the man in the moon."

What is claimed for Mr. Colling is, that he originated improvement in the Short-horns, and this I understand it is intended to deny, in the above quotation. It is obvious that this is a fair construction, because it is said in the same connection, that Mr. Colling bought as good cows as he ever bred, and that his "chief merit" was "making the Short-horns famous."

Rev. Henry Berry, in a pamphlet entitled *History and Pretensions of Improved Short-horns*, published in 1824, states that in 1810, a piece of plate was presented to Mr. Colling, with this inscription: "To CHARLES COLLING, *the Great Improver of the Short-Horned Breed of Cattle,*" &c. This inscription, Mr. Berry says, was "*signed by fifty of the most eminent breeders in the North.*"

These "most eminent breeders" were, it will be remembered, eye-witnesses of Mr. Colling's efforts, and their testimony will be received by *reasonable* people, as entitled to credit,—notwithstanding it may be asserted by some who are, perhaps, specially under *lunar influence*, that the "man in the moon" did as much in improving the Short-horns as Charles Colling!

4. The reviewer says Col. Jaques' "Cream-pot" cows were nothing more than "every breeder" of *grade* Short-horns "has produced by the score," and that they are only an example of "what boasting and assurance can do, in palming off a very common thing upon such as know no better."

Whatever was the *motive* in making these statements, they will have no effect to injure Col. Jaques' stock, with persons who know by experience (and there are many such) its high value. To some, the question may suggest itself, whether it was necessary for the reviewer to *go so far* to find an example of "what boasting and assurance can do, in palming off a very common thing?"

SANFORD HOWARD. *Boston, April*, 1852.

Cultivation of the Ruta Baga and Belgian Carrot.

The argument is frequently urged on the part of farmers, that the labor and attention required for root crops are quite too great, for the prices that are obtained for beef and mutton. Now, this is a very easy mode of disposing of a question, that requires something more than mere assertion to convince a man who has repeatedly found by practical experiments, that no branch of farming will afford a better profit than either ruta baga or field carrots, when grown upon suitable soil, and subjected to a careful system of culture adapted to those crops. What these peculiar conditions are, it might not be improper to somewhat carefully examine. It is useless to plant ruta bagas on any other than a rich soil, which has been brought into the finest tilth by frequent plowings and harrowings; and to secure a speedy growth of plants, well fermented barn-yard and stable manure should be applied at the rate of twenty-five two horse wagon loads per acre. The manure should be plowed under, the ground then should be harrowed, and the next thing to be done is the forming of the drills with a plow, which should be two feet apart from center to center. The seed should be sown with a drilling machine, to be constructed peculiarly for the crop, and at least one and a half pounds per acre of seed should be sown, in all locations where the turnep fly is abundant, and is liable to be very destructive on the plants, and where these, or other equally baneful insects do not prevail, one half of the above quantity of seed will be sufficient. As soon as the plants put forth four leaves, an expanding and contracting steel tooth cultivator should be passed through the rows levelling down the drills, and so set that the teeth will work close to the plants without destroying any of them. The hand hoe then must be used to cut out the weeds and partially thin the plants. A shovel plow must then be used, and by passing it down between each row, the drills will be brought back to their original shape, and fine fresh soil thrown up close to the young turneps. In the course of three weeks, weeds will again make their appearance, and to destroy them, the steel tooth expanding cultivator must be used as before, followed by another hand hoeing and thinning, and the shovel plow may be used the second time to form the drills. This may be repeated the third time, with advantage in some cases, but ordinarily twice will secure, on moderately suitable soil, from 600 to 800 bushels of ruta bagas per acre. The period for sowing very naturally differs, depending much on the latitude, but as a general thing the month of June is the most suitable, commencing the first of the month in high northern latitudes, and ending the last, in latitude forty, which is as low as the plant can be profitable grown, in consequence of its liability to form a great top and small roots much south of this parallel. We have repeatedly given out our ruta baga crop to be hand and horse hoed by the season at five dollars per acre, including three dressings and thinnings in the manner described. As the work was done by experienced hands, good wages were made, but unitiated hands undertaking the management of the turnep crop, and conducting their operations upon a scale that would secure a full crop, would require seven or eight dollars per acre inclusive of board. This item of expense of course does not include plowing, manuring, harrowing, forming drills, seed and seeding, all of which added would bring the cost of an acre of ruta bagas up to twenty dollars, and affording a crop of at least 600 and possibly 1,000 bushels, worth, for feeding stock, at least 12½ cents per bushel.

The management of land for the Belgian carrot, is very similar to what is required for the ruta baga, the former requiring, however, a much deeper and finer soil, and the plants in the rows need not be thinned quite so wide, but in all other respects the treatment may be the same. The carrot will answer for a more southerly latitude, and the young plants are very seldom damaged by insects. It also yields a heavier return, and a 1,000 bushels per acre is a common crop.

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Whatever you Do, Do Well.

Eds. Cultivator—As in a moral point of view, it is useful to have "seasons of reflection,"—reviewing the events of the past, and inferring their effects on the future—so in agriculture, it is useful to "compare notes," to interchange sentiments and practices, and from events, and sentiments, and practices already realized, to "lay our plans," regulate our operations, and infer their results for the future.

Now it is an axiom, which may be considered universal in all industrial pursuits, that whatever is done at all, should be "*well* done;" and permit me to add, that in farming, whatever crops are raised, should be "good crops,"—that whatever animals are bred, should be "well bred,"—whatever animals are fed, should be "well fed," and whatever is seeded, should be "fully seeded." Whether the cereal grains or grasses be sown, the ground should be fully occupied with the young plants. "He who sows sparingly shall reap sparingly, and he who sows bountifully, shall reap bountifully," are declarations as true as they are ancient, and should be, especially in seed time, in every husbandman's mouth. Good land, in ordinary cultivation, is *bound* to be occupied, and if we do not occupy with good seed, nature will most asssuredly occupy with weeds. There is surely something ennobling, morally elevating, in liberal, enlightened, and successful farming.

If a man would succeed in cultivating the soil, he *must not* be niggardly, but must lay out freely for labor, for manure, for good and durable implements, convenient and *permanent* fixtures; and though mentioned last, *not* least, good and plentiful *agricultural reading*.

It is important, however, sedulously to guard against extravagance and waste, as well as penuriousness; the most scrupulous and *exact* economy should pervade every department; nothing neglected or suffered to run to waste—and a general appearance of order and harmony should give unity and beauty to the whole. C. R. Smith.
Solon, Cuyahoga, Ohio, Jan. 2, 1852.

Action and Re-action in Farming.

(Original Hints.)

Never keep animals on short allowance—if you starve them, they will surely starve you.

Although in draining land thoroughly, your purse may be drained, yet the full crops that follow will soon fill it again.

Trying to farm without capital, is like trying to run a locomotive without fuel. Money and wood must both be consumed, if they are to move the machine of the farm or of the rail.

Always give the soil the first meal. If this is well fed with manure, it will feed all else; plants, animals, and man.

If you wish to give an energetic movement to all your farm machinery, and keep its hundred wheels in rotation, be sure not to be without a good rotation of crops.

If you allow your animals to shiver, your fortune will be shivered in consequence; that is, the farmer who leaves his cattle to the winds, will find his profits also given to the winds.

Heavy carrot crops for cattle, will soon return carats of gold.

Did you ever hear the musical notes of a starving herd of hogs? Extinguish by food those notes speedily, if you would avoid even more annoying notes after pay-day has passed.

Learn as much as possible the experience of the skilful; the man who depends on teaching himself will be likely to receive very poor lessons,—or, as Dr. Franklin has it, he will find "he has a fool for his master."

Fences operate in two ways—if good they are a defence, if poor an offence.

Many a farmer, by too sparingly seeding his new meadows, has had to cede his whole farm.

Every farmer should see daily every animal he has, and inspect its condition. Weekly visits, as with some, soon result in weakly animals.

The man who provides well sheltered cotes for his sheep in winter, will soon find plenty of coats for his own back.

A good housewife should not be a person of "one idea," but should be equally familiar with the flower garden and flour barrel; and though her lesson should be to lessen expense, yet the scent of a fine rose should not be less valued than the cent in the till. She will doubtless prefer a yard of shrubbery, to a yard of satin. If her husband is a skilful sower of grain, she is equally skilful as a sewer of garments; he keeps his hoes bright by use; she keeps the hose of the whole family in order.

"Manure is money," and "short paper" is like a short plant;—a note at bank matures by falling due,—an oat in the field also matures by falling dew—but they will be found in both cases shorter than wanted, unless the fiscal bank and the bank of earth both receive timely deposits.

To abuse animals by starving them, is as base, as the hope of gaining by it is baseless.

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Increase in Ornamental Planting.—The *Horticulturist* informs us that 250,000 ornamental trees have been planted in private grounds in and about Newport, R. I., within the last six years.

Trial of Agricultural Machines,

AT GENEVA, JULY, 1852.

Great difficulty having been found in deciding upon the merits of reaping, mowing, threshing, and other farm machines, at our State Fairs, owing to inability to test them effectually, the Executive Committee of the *N. Y. State Ag. Society* this year resolved greatly to enlarge their premiums, and to appoint a meeting, during the ensuing harvest, for the thorough trial of all such machines and implements.

Several farms having been offered, with the crops and grounds necessary for the purpose, a committee was appointed to examine the several locations, upon whose report, made to the Board at a meeting held at Utica on the 6th of May, it was decided that the trial should be held on the farm of Horace D. Bennett, *Geneva*—a farm every way admirably adapted for the purpose, having on it forty acres of wheat, forty of barley, and oats, grass and fallow land in abundance. The *time* for the trial, owing to the backwardness of the season, has not yet been definitely fixed. It will, however, take place between the 10th and 25th July—a few days earlier or later as the case may be—depending upon the maturity of the wheat crop.

We look upon this measure as one of great importance, and we doubt not the occasion will draw together a large number of visitors to witness this interesting trial of the skill and ingenuity of our inventors and mechanics.

We annex a list of the Premiums offered, and the Judges by whom they are to be awarded:

JUDGES.

John Delafield, Seneca Co.
Anthony Van Bergen, Greene.
Jonathan Edgecomb, Orleans.
Ransom Harmon, Monroe.
J. Stanton Gould, Columbia.

Sanford Howard, Boston, Mass.
B. B. Kirtland, Rensselaer co.
John Mallory, Yates.
A. J. Heermance, Dutchess.
J. E. Holmes, Holyoke, Mass.

PREMIUMS.

Best Grain Reaper,	Diploma and	$50
2d do		30
3d do		20
Best Mowing Machine,	Diploma and	50
2d do		30
3d do		20
Best Steam Engine for farm purpose, to be so constructed as to be moveable readily to any part of the farm,	Diploma and	30
2d do		20
3d do		10
Best Gauged Grain Drill,	Diploma and	25
2d do		15
3d do		10

Drills may compete whether arranged for depositing manure or not.

Best Horse Power for general purposes, on the sweep or lever principle,	Diploma and	$25
2d do		15
3d do		10
Best Horse Power, on endless chain or railroad principle,	Diploma and	25
2d do		10
3d do		15
Best Iron Horse Power,	Diploma and	25
2d do		15
3d do		10
Best Flax and Hemp Dressing Machine,	Diploma and	25
2d do		15
3d do		10
Best Thrasher, to be used with horse or steam power,		10
2d do		8
3d do		5
Best Seed Planter, for horse or hand power, for hills or drills,	Diploma and	10
2d do		8
3d do		5
Best Cultivator, for general purposes,	Diploma and	10
2d do		8
3d do		5
Best Broad Cast Sower,	Diploma and	10
2d do		8
3d do		5

A Remarkable Cow---and Wonderful Calf.

The report of the committee on cows to the Windsor county (Vt., Agricultural Society, gives the following facts relative to a cow belonging to John L. Lovering of Hartford in that county. She is 10 years old, and has been subjected to repeated trials in different years, as to the quantity of milk and butter yielded. During 10 days early in the past summer, she gave 516 lbs. of milk, ranging from 51 to 53 lbs. per day. The milk of the last four days was made into butter, and after thorough working, weighed 10 lbs. 5 oz., or 18 lbs. per week. This experiment was very carefully made by a disinterested person, under the special direction of the committee. Similar experiments were made in previous years with very nearly the same results. The owner states that this cow has no pedigree, but he intends that her descendants shall have, some of which are young animals of great promise.

W. H. Bristol, of Lewiston, N. Y., gives the following account of a calf, owned by J. M. Buttery of Lewiston, in the Lockport Journal:

> The calf was ten months old the 15th of last month—is of rather more than usual size for that age; stands three feet nine inches in height; measures or girths five feet one inch; measures five feet six inches from the horns to the extremity of the hips, and will probably weigh at this time (and I will reckon it low, so as to be correct,) about 400 lbs. She is a cross of the Durham and Devonshire, well formed and of beautiful appearance.
>
> When but two months of age it was discovered she had quite an udder, and by trial, found that she gave milk. From that time to the present she has not failed to afford from one pint to a quart of as rich and flavorous milk as any good dairy cow affords, at a mess, and *now* it is necessary to milk her regularly twice a day. After good spring pasturage is afforded her, doubtless she will give from eight to ten quarts per day. It is, indeed, a strange "freak of nature," and is worthy of the notice of the curious and speculative.
>
> I will take this opportunity to state to the incredulous and disbelieving, that I will pledge myself to substantiate the facts I have herein stated. I would also say, that I am well acquainted with the owner of said calf, have seen said calf milked, seen also the quantity given at a milking, know that butter was made from the cream thereof, in quantities averaging from half a pound to two pounds, and that there can be no *humbug* in relation to all I state.

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To keep Bugs from Vines.

Eds. Cultivator—I have tried ashes, plaster, lime, road dust and tobacco juice, with some success, but a spoiled clam, the cleanings of a wool carding machine, or a lock of wool soaked in fresh oil, placed near the root of the vine, I never knew fail—these also promote the growth of the vine. The bugs are attracted by the smell of the vine, but do not like tainted fish. Phineas Pratt. *Deep River, Ct.*

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To remove Ants.—A correspondent says to remove ants from any place which they infest, apply a little spirit of turpentine with a feather.

Lice on Fowls.—The same correspondent informs us that the following simple means will effectually prevent the attacks of this vermin. Wash the poultry house with a strong solution of tea of Red Cedar boughs, and then smoke the house with cedar wood.

Horticultural Items.

Liquid Manure for Fruit Trees.—A correspondent of Moore's New-Yorker, strongly recommends from his own experience, the application of the liquid portions of manure, (which are commonly wasted,) to fruit trees, more especially in very dry weather, and to those which have begun to be injured by drouth. He digs a cavity round the tree, pours in the odorous liquid, and immediately replaces the earth. "An extraordinary growth immediately commences, and shoots are forced out in a few weeks truly astonishing both in length and size." Soap suds he finds good; but not at all equal to liquid manure.

Stealing Fruit.—One of the best things for the prosperity of the country is planting plenty of fine fruit; the incentives are heavy crops of delicious luxuries; the discouragements are fire blight, black knot, caterpillars, curculios, borers, yellows, cherry birds, and bad culture, and when all these have been surmounted, then comes the fruit-thief for plunder. Some have endeavored to plant enough for all; the result has been that the thieves have taken the very best, the first pick, and left the rest for the owner. Where they cannot get good fruit, however, they will take bad, wretchedly bad, rather than lose their booty. The Prairie Farmer says, "We are called on yearly to mourn the loss of some villainously hard green winter apples, poached in August." He seems to feel some apprehensions that they may get the cholera.

Securing Passing Advantages.—We once had the very beautiful present of a bunch of a dozen plums of a new variety sent us from a distance, consisting of a branch so closely covered as to form a cylinder of solid fruit. The shoot on which they grew afforded a few nice buds, from which we now have some young trees growing, *infallibly correct.*

Garden Walks.—The growth of weeds in gravel walks has been securely prevented, by forming a solid bottom beneath the gravel, of marl and coarse gravel or small stones, rammed down hard, and through which no weeds nor grass can penetrate.

Destroying Mildew.—Marshall P. Wilder, in a communication to the Journal of Agriculture, speaking of mildew on grapes, green-house plants, and elsewhere, says, "We have for more than fifteen years used sulphur for this purpose, and in no instance has it failed to effect a speedy cure. We have known instances where mildew, in the space of a few days, would spread its sporules over a large rose-house, destroying nearly all the foliage of the plants, and this, by the use of sulphur spread on the walks and over the plants, was extirpated in a short period."

The Baldwin Apple at the West.—We observe a statement in the Michigan Farmer, on the authority of James Dougal, a skilful fruit raiser in Canada, near Detroit, that the liability of the Baldwin to rot, may be counteracted or avoided by gathering two weeks before ripening; and that it will then possess fully those good qualities to which it is indebted for its popularity in its native place.

Some fruits attain perfection when ripened on the tree only; and others are sure to be spoiled if left till that period. This matter is becoming understood by good culturists. Some good sorts have been denounced as worthless by those who have not been aware of the treatment they require—the Ribston Pippin for example, which, except far north, must be picked before full maturity.

The Apple Market.—Some fear the apple market will be glutted, although population and facilities for transportation are rapidly increasing, and the economy of using fruit becoming better understood. The New England Farmer says, "A gentlemen in New Hampshire informs us that when his orchard came into bearing some 30 years ago, the best market he found for his apples was at Portland. This year he refused $425 for the product of less than acre and three-fourths, *to be taken on the trees.*" The editor estimates about 200,000 families in Massachusetts—and if five barrels, on an average, were consumed in each family per annum, it would require *one million barrels* yearly for home consumption in that state, far exceeding the amount now raised—and saying nothing about exportation.

The Curculio.—Corroborating facts are always interesting. The editor of the Prairie Farmer, on a visit to the orchards of E. Harkness of central Illinois, says, "Mr. H. has a piece of ground of which he proposes to make at the same time a plum orchard and a hog-pasture. The idea of the thing was got from a neighbor who had an orchard of this fruit where the swine ran, and who eat of the fruit abundantly for seven years; though none standing out of the enclosure bore; but on changing the tenants to another part of the farm, every plum was stung." This method has been often described for the last twenty years or more, but we are always glad to see new proofs of its successful working.

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Best Method of Applying Guano.

I am satisfied from experience and observation in the use of Guano, for the past twelve years, that the best method, decidedly, of applying it to crops in our dry climate is, to plow or spade it into the ground; and autumn is the best season for doing this, as it gives time for the pungent salts contained in the guano, to get thoroughly mixed with the soil before spring planting. Do not fear to lose the guano by plowing it in *as deep as you please*—it will not *run away*, depend upon it. At the south, it loses half its virtue if not plowed in at least three inches deep; six to twelve inches would be still better.

Spread broadcast on grass land, late in the fall or very early in the spring. If not plowed in before sowing buckwheat, rye, or wheat, then spread it broadcast after sowing the grain, and harrow well and roll the land. This last operation is quite important.

Caution.—Never put guano in the hill with corn, no matter if covered two or three inches deep; for the roots will be certain to find it, and so sure as they touch the guano, so caustic is it, that it will certainly kill the corn; the same with peas, beans, melon vines, in fact most vegetable crops. Wheat and other small grains have so many roots, and litter so well, there is no danger of guano killing them when sown directly with the seed.

Still, as before remarked, it is better to plow it in before sowing the seeds.

After corn has come up, the only safe way of applying guano to this crop is, to take about a table spoonful, at the first time hoeing, and dig it in an inch or two deep, around the corn, six inches at least from each stalk. A table-spoonful is sufficient unless the land be very poor; and with this quantity it will take about 250 to 350 lbs., per acre, according to the distance the hills are planted apart. If the soil be rather poor, a second dose administered in the same manner, at the time the corn first shows its silk, will add considerably to the yield in grain, if followed by rains, but little or nothing to the growth of stalk. Guano increases the size and growth of the grain more than it does that of the stalk; hence one must be content to wait till the grain is fully matured before giving an opinion of the virtues of guano.

Before applying the guano, it is better to mix it well with an equal quantity of plaster of Paris or charcoal dust. Either of these substances help to retain the ammonia and prevent its evaporating.

The genuine, unadulterated *Peruvian* guano, is so much superior to any other kind, that it is in reality the *cheapest*, though the price is considerable higher than that of other qualities.

As corn is very late this year, farmers will do well to apply guano to it. This will accelerate its growth, give a larger crop, and cause it to mature at least one week earlier. A. B. ALLEN. *New-York*, *May* 10*th*, 1852.

Bones and Lime as a Manure.

MR. EDITOR—As a practical farmer, I feel anxious to adopt all laudable means to improve the soil of my farm, by the use of such manures and agents as will promote that end, and the object of this communication is to inquire,

1. What effect burnt bone dust will exert on land having a light clay soil; how many bushels per acre should be used, and the mode of applying it?

2. What effect would lime have upon soil, through which gas had passed, and in what quantities should it be used per acre?

Would it be beneficial when applied to fruit trees, and in what quantities? Would it destroy the insects that usually infest the roots of fruit trees?

The above articles may be had in St. Louis in any reasonable quantities. Answers to the above inquiries, at your earliest convenience, are respectfully solicited. In conclusion, I would add, that I have read with much pleasure and profit, the numbers of the Cultivator for several years, and would not be without some of the numbers for the whole amount the paper costs me per year. Respectfully and truly yours, DENNIS LACKLAND. *Locust Grove, Mo., March* 6, 1852.

It is hard to say, without either direct experiment, or very minute and accurate analysis, with a view to this point, what soils will, and what soils will not, be benefitted by bone manure. Those quite destitute of phosphate of lime, will, of course, be greatly improved. As this is only one out of many of the ingredients of manure, a few bushels per acre, in connection with a moderate, or rather small application of yard manure, will usually be enough. Bones, however, contain other valuable enriching substances besides the phosphates, which is dissipated by burning, but is wholly saved by dissolving in sulphuric acid. Bone dust or burnt bones, may be sowed over the surface, and harrowed or plowed in; but the paste made by dissolving in sulphuric acid, should be made dry by mixing with dry peat, sawdust, ashes or plaster, before spreading.

Lime used in gas works would not, probably, produce an effect much different from other slacked lime. Experiment will show best its utility. Two or three hundred bushels per acre would be a moderate application. Most fruit trees contain large quantities of lime, and applied to them, except on soils already rich in the carbonate, would probably prove of considerable benefit. Insects would not be likely to be much influenced, although it is believed in some degree to repel the peach worm.

Keeping Fruit Fresh.

The New England Farmer says he has preserved gooseberries by placing the fruit, picked rather green, in bottles so as to fill them, and then filling all spaces to the mouth with water. The bottles are then set in a kettle of cold water where they remain till it is made to boil, when they are taken out, immediately corked very securely, and set in a cellar. To this the Prairie Farmer adds, "Very likely; and we have many times put gooseberries into a bottle, clean and dry, without any cold or hot water or any thing else, except corking tight and covering the cork with sealing wax, and putting into a cellar; and had gooseberry pies as fresh at New Year's as though the fruit had just been taken from the bush." This mode would serve admirably for gooseberries and currants (nearly ripe,) but for cherries and some other smaller fruits the water process has proved much the best. High-flavored sour cherries, as the Mayduke, Early Richmond, &c., keep much better than the heart cherries—probably Downer's Late, a very high-flavored sort, would be one of the best of the latter class. The common black or *junk* bottles have been found to serve a good purpose, if perfectly clean, having never been previously used; but transparent bottles, showing exactly the condition of the fruit, are of course best. An intelligent and skilful neighbor has succeeded by still another process in preserving peaches, (cut into large pieces and divested of the skin,) as fresh as when taken from the tree; not in their weight of sugar, but in a very small quantity of that material. We have eaten them after mid-winter, and could not have told by the flavor the difference between these and the fresh dish served with cream at mid-autumn. This process has cost months of labor and experiment before reaching its present state of perfection, and it is yet to undergo further attempts at improvement another season; and in the mean time will not of course be given to the public. Dr. Lee thinks that fruit cannot be kept long, even if perfectly excluded from the air, at a temperature above 60° Fah., but this mode of treating peaches appears to constitute an exception.

MAXIMS FOR THE YOUNG.—Keep good company or none.

Always speak the truth.

Feeding Poultry.

Mr. Salmon Cook, in your May number, wants to be informed in regard to feeding poultry. As I have had three years experience, with some twelve different breeds, I will give him my views in this matter. It depends upon the breeds, I think, as to the manner of feeding. All of the Asiatic breeds, I feed in this wise: I make three boxes that will hold half a peck of corn each. I fill one with corn, another with oats, another with buckwheat, and set them all before them at once, and am careful not to let either get empty. I feed all of the large breeds in this way. Once a week in winter, put in to the coop a cabbage or two, to six or eight fowls.

My smaller breeds I feed in winter, only on one kind of grain, but keep it before them, such as the golden and silver pheasant and bantams, as these will not lay in the coldest months, at any rate as far as my experience goes, even if fed upon all sorts of grain. All fowls should be placed so as to have the sun, and come to the ground; also should have a box of ashes set so as the sun will shine upon it, as they will wallow in it more freely. If they have plenty of gravel, they will not become too fat, or oyster shells, or burnt bones pounded fine. I am satisfied that this is the cheapest way of keeping all of these breeds. Geese do not require to be kept in this way, as they will be more healthy if not fed so high. M. F. M.

Chicopee, May 5, 1852.

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Habits of the Curculio.

In answer to the inquiries of our friend A. C., of Otsego county, we give the following from Thomas' American Fruit Culturist:

The *curculio*, is a small insect not more than a quarter of an inch long, of a dark brown color, the sheaths covering the wings slightly variegated with lighter colors, the body resembling in size and appearance a ripe hemp seed. It is distinguished by an elongation of the head, resembling a conspicuous rostrum or beak projecting from the front part of its thorax.

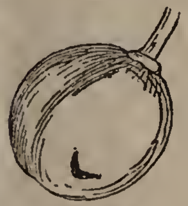

Fig. 244.

About the time the young fruit attains the size of a pea, the curculio begins its work of destruction. It makes a small crescent-shaped incision in the young fruit, and lays its egg in the opening. The presence of the egg may be easily detected by these incisions upon the surface; the annexed figure, (244,) represents one of these magnified twice in diameter. The egg soon hatches into a small white larva, which enters the body of the fruit and feeds upon it, causing, usually, its premature fall to the ground.

The period at which the young fruit falls, after being punctured, varies with its age at the time of the injury. The earlier portions drop in about two weeks; but if the stone is hard when the egg is laid the fruit remains till near the usual period of ripening, sometimes presenting a fair and smooth exterior, but spoiled by the worm within.

The insect, soon after the fall of the fruit, makes its way into the earth, where it is supposed to remain till the following spring, when it is transformed into the perfect insect or beetle, to lay its eggs and perpetuate its race. Instances, however, have occurred, where the transformation has taken place within twenty days of the fall of the fruit.

The curculio travels by flying, but only during quite warm weather, or at the heat of the day. The insects mostly confine themselves to certain trees, or to the same orchard. But the fact that newly bearing and isolated orchards are soon attacked, clearly shows that in occasional instances they must travel considerable distances. Indeed, they have been known to be wafted on the wind for a half mile or more, the windward side of orchards being most infested, immediately after strong winds from a thickly planted plum neighborhood. In the cool of the morning, they are nearly torpid, and can scarcely fly, and crawl but slowly; hence, at this time of the day they are most easily destroyed.

Their flight appears to be never more than a few feet from the ground, and successful attempts have been made to shut them out of fruit gardens by means of a tight board fence, nine or ten feet high, entered by a tight gate.

[FOR THE CULTIVATOR.]

The Old Mill.

Beneath a hill, beside a wood,
Remote from haunts of men,
In modest guise the old mill stood,
Down in a willow glen;
A narrow path led to the door,
And then turned back again.

I knew it in my early days,
For it was nigh my home;
It was the scene of boyish plays,
For hither I would come
In idle hours, released from school,
And free about it roam.

Its glassy pond was my delight,
While yet a truant boy;
I never wearied at the sight,
Its pleasures could not cloy,
For every season in its change
Brought with it some new joy.

In early spring, with pole in hand,
And line with barbed hook,
Upon its margin I would stand,
And deep into it look;
Oh, I had been a learned man
If thus I'd conned my book.

I've had few prizes for my share,
Since manhood I've attained,
And those I find with constant care
Have still to be maintained;
But the *first fish* I drew to land
Was pleasure all unfeigned.

Far in its waters I would glide
When summer suns were high,
Or on its polished surface slide
When winter swept the sky—
Those days are past;—yet oft I think
How happy then was I.

The miller's whitewashed cottage too,
That stood behind the mill;
The barn, the shed of greyish blue,
I think I see them still;
A little garden smiled in front,
'Twas watered by a rill.

The miller was a sturdy man,
And jovial too was he,
And while amidst his flour and bran
Would sing a merry glee,
Or with the farmers pass a joke,
For "many a joke had he."

The miller's wife, the miller's child,
They made his heart so light;
She was a matron kind and mild,
And she a maiden bright;
I loved to see them walk to church,
It was a pleasant sight.

Those times again may never be!
The miller he is dead,
And where the old mill stood, you see
A factory instead;
A thousand spindles now fly round,
Where only one wheel sped.

The pleasant wood that grew around,
And each sequestered spot,
Have since been levelled with the ground,
To make a village lot;
And where to find my early haunts
I now have quite forgot.

I do not care these scenes to view,
Or gaze this landscape o'er,
For it does quiet thoughts renew
Where quiet reigns no more;
I see a thriving village rise,
And yet my heart is sore.

C. F. L. F.

Milwaukie co., Wisconsin.

Supplying a Farm with Water, and Draining.

EDS. CULTIVATOR—Encouraged by the receipt of several letters, stating that the practice of housing sheep during winter, which I recommended in the Cultivator some years since, has proved economical, and improved the quality of wool, I am induced to send you the following items of experience, which appear to me of some importance.

I have owned for fifty years a farm of one hundred acres, and for thirty I had no means of watering my stock, but to drive them to the river, which being frozen in winter made it difficult for cattle to drink, and quite impossible for sheep. About forty acres of my farm is interval; then lies a flat of good plow land, and next to this a side-hill, at the summit of which, on a gravelly flat, stands my barn. For twenty rods in the rear of the barn, the soil is sand and gravel—then commences a rich loam resting upon a ledge of lime stone. Where the gravel and the ledge of rock met, there was water in the wet season. At this place I sunk a well to the depth of 15 feet, which filled with water to the depth of 12 inches, but rose no higher. I concluded that there was rock or clay, which operated as a dam below the well, and that the water flowed off through the gravel. I then commenced a ditch some 12 rods below the spring, and about two feet lower than the bottom of the well. In this ditch I placed a pump log; throwing the dirt back until I had room for another. I proceeded in this way to within twenty-five feet of the spring, where I struck a ledge of lime stone, reaching to a level with the bottom of the well. Removing the stone with a light blast, I reached the spring, from which issued a stream of water, which would fill an inch pipe. This spring has never failed to afford a large supply of water to my barn in winter, and in summer it flows above ground, supplying the pasture. Thus at a cost of not over $30, I have added $500 to the value of my farm.

Again, I had a plow field of twelve acres, in the center of which was about one-third of an acre, which was too wet for planting, and usually remained so just long enough to destroy the crop. I found that the water came out from seams in a rock, and being dammed up by a soil of hard-pan a few rods in width, was forced to flow near the surface of the ground. As the land was on a side-hill and could be easily drained, I made at an expense of $2, a blind ditch, which carried off all the water, and in four days the land was as dry as any in the field. It was planted to corn and produced the best yield, as it had not been injured by previous cropping.

Pieces of land situated similarly to mine, may frequently be seen, which by a slight expense can be made available and valuable, and also a supply of water be furnished for farm purposes. Yours truly, JOHN S. PETTIBONE.
Manchester, Vt.

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GREAT CROP OF WHEAT.—The Editor of the Michigan Farmer states, that on a farm 15 miles north of London, a crop of wheat was nearly ready for harvest, which fully promised *sixty* bushels per acre. It was as high as a man's head, stood thick, and the heads were long; the land was at first poor, but was brought up by draining and manuring, mostly with stable manure.

NEW PUBLICATIONS.

THE HOWADJI IN SYRIA, by George William Curtis: Harper & Brothers, New-York.

We are indebted to Messrs. E. H. PEASE & Co., of this city, for a copy of this interesting description of travels in the east. It is a written in a graphic style, and abounds in the rich drapery of metaphor, which characterises oriental language. The author carries you along with him in a familiar way—you see what he sees, feel as he feels, and for the moment rejoice in all the exuberance of fancy which eastern scenery is calculated to inspire. The book is unencumbered with statistics, and the numberless trifling incidents of travel, and will be read with interest by those who prefer gems of thought to sands of the desert.

THE AMERICAN VETERINARY JOURNAL, edited by Geo. H Dadd, M. D.: Boston, Mass. 32 pages, monthly, at $1 a year.

A work of this kind has long been needed, and this publication is issued under auspices that will ensure it success. The editor is a practitioner of Veterinary Surgery, and writes to considerable extent his own experience and observations. The want of anything like knowledge of the diseases of domestic animals and their remedies, results in an immense loss to the farmer every year, much of which might be saved by subscribing to this journal.

LEAVES FROM THE NOTE BOOK OF A NATURALIST, by W. J. Broderip, Esq., F.R.S. E. Littell & Co.: Boston. G. P. Putnam, New-York.

The contents of this work have appeared in the numbers of Littell's Living Age, and this fact alone will recommend it to the favor of the reading public. Very many pleasing and instructive facts, connected with the natural history of animals, are related, and ancient mythology is now and then called up to impart its strange fascination to the narrative.

LITTELL'S LIVING AGE—weekly, at $6 a year; E. Littell & Co., Boston Mass.

This publication is without a rival in the sterling interest and permanent value of its matter. It commends itself to the student as a means of forming correct literary taste, and to the general reader as an instructive and entertaining magazine. It is, in itself, a library of Biography, History, and Literature, of the highest order, and is deserving of a place in every well informed family.

Cattle Shows for 1852.

STATE.

New-York—At Utica, September 7, 8, 9, 10. Trial of Reapers, Mowing Machines, &c., at Geneva, about the middle of July.
Ohio—At Cleveland, Sept. 15, 16, 17.
Michigan—At Detroit, Sept. 22, 23, 24.
Indiana—At ——— Oct. 19.
Pennsylvania—At Harrisburgh, Oct. 20, 21, 22.
Georgia—At Macon, Oct. 19 to 23.
Maryland—At Baltimore, ———.
Wisconsin—At Milwaukie, Oct. 6, 7, 8
Vermont—At Rutland, Sept. 1, 2, 3.
Canada West—At Toronto, Sept. 29, 30.
Rhode Island—At Providence, Sept. 15, 16, 17.

COUNTY SHOWS.

☞ We are unable to announce the times for holding but few of the fairs of this or other states, and we shall be greatly obliged to any of our friends who will give us notice of the times and places fixed upon for holding any of the County Fairs, in all of the states of the Union, the ensuing autumn

NOTES FOR THE MONTH.

Acknowledgments.—Communications have come to hand, during the past month, from A Youth, R. B. Abel, S. P. Phillips, Gurdon Evans, Geo. Cargill, J. W. Clute, Sanford Howard, J. G. C. Jr., J. P. Holt, C. H. Cleaveland, E. B., N. B. G., T. E. B., W. C. [Sandwich Islands,] S. P. Chapman, M. F. M., Robert Shiell, A Subscriber, A. Peck, C. W. L., E.E., Wm. H. Brewer, Victor Gilbert, C. F. L. F., B.

Books, Pamphlets, &c., have been received, during the past month, as follows: The Howadji in Syria, from E. H. Pease & Co., booksellers of this city.——Leaves from the Note Book of a Naturalist, from E. Littell & Co., publishers, Boston.——Pictorial Field Book of the Revolution, by B. J. Lossing, No. 22, from Harper & Brothers, publishers, New-York.——A dozen pounds very superior Maple Sugar, from E. B. [We should be glad to know to whom we are indebted for this fine sample of sugar.]——Two California Potatoes, one weighing 1 lb. 4 oz. and the other 12 oz., from Henry Hinckley, just from California.

Cattle Sales.—We would remind our readers that Mr. Morris' great public sale of improved breeds of cattle, sheep and swine, is to come off at his place on Wednesday the 9th of this month. (See his advertisement.)

It will be seen by reference to Mr. Allen's renewed advertisement, that his extensive sale of high-bred cattle, is to be held on the Troy road, near this city, on the 18th of August next.

We anticipate a large attendance and spirited bidding at both these public sales, for none more attractive have ever been offered to the American public.

New-York State Fair.—The last meeting of the Executive Committee of the N. Y. State Ag. Society, was held at Utica on the 6th of May, when the grounds for the State Fair were selected, and such preliminary arrangements made as the case required. The location selected for the Fair, is on the south side of the plank road to New-Hartford, about two miles west of Utica. The only objection to the ground, is its distance from the center of Utica. It was, however, the nearest piece of ground that would answer the purpose, which could be obtained. The citizens of Utica are entering upon the work in fine spirit, and will have all things in readiness for the Fair, which it will be remembered, is to be held on the 7th, 8th, 9th, and 10th days of September next.

☞ The next meeting of the *American Pomological Congress* is to be held at Philadelphia, to commence at 10 o'clock, A. M., on Monday the 13th of September, in the Chinese Museum Building. The Pomological, Horticultural, and Agricultural Societies throughout the United States and Canada, are invited to send such number of Delegates as they may deem expedient. And the Delegates are requested to bring with them specimens of the Fruits of their respective districts. Packages and boxes of fruit for the Congress may be directed to the care of Thomas P. James, Esq., No. 212 Market street, Philadelphia, should the owners be unable to give their personal attendance.

Hazard of Importing Cattle.—While in England last season, Gen. James S. Matson, of Bourbon, Kentucky, purchased of Henry Ambler, Esq., of Watkinson Hall, the famous improved Durham bull "Senator," which had won quite a number of prizes at county shows, and in 1849, received the highest "local prize," at the show of the Royal Ag. Society, and also the first prize of £40, (about $200,) of the same Society in 1850. He also purchased a prize cow and a bull calf from Mr. Ambler. These animals, together with a beautiful shepherd's dog, and some Cochin-China fowls, were shipped to New-York in April last; and we regret to learn, as we do from O. H. Burbridge, Esq., of Paris, Kentucky, who was awaiting their arrival in New-York, that "Senator," died on the passage, and the cow also a few days after her arrival in New-York. This is a very heavy as well as a most vexatious loss, for it is one which can not be replaced. The young bull arrived in good order, and promises to equal any thing of its kind ever introduced into the country.

Cattle for Virginia.—J. R. Richardson, Esq., of Wythe county, Va., recently purchased three calves, a bull and two heifers, from Col. Sherwood of Auburn. We did not have an opportunity of seeing the animals, as they passed through this city on their way to Virginia, but a gentleman who did, thus speaks of them in the Evening Journal of this city:—"We congratulate Mr. Richardson on his selection, and have no doubt that this stock will prove a great acquisition to the Old Dominion. The price paid for the calves was $500, and we consider the purchase an excellent one, taking into consideration the superiority of the stock. It is gratifying to learn that there is a very fair demand for the improved stock of our State, and animals are being sent to almost every State in the Union, as well as to the British Provinces, at prices that are remunerating."

Survey of Essex County.—We are glad to learn that the State Agricultural Society have made arrangements with W. C. Watson, Esq., of Port Kent, for an Agricultural Survey of the County of Essex, for the next year's volume of Transactions.

Pitching Hay by Horse Power.—Mr. Robert Gilchrist, of West Galway, N. Y., informs us that he has tried the plan of unloading hay recommended by a Pennsylvania correspondent of the Cultivator, and has found it a great saving of labor. For a full description of the plan, see Cult. for 1848, p. 122.

Great Cheese Factory.—George Hezlep's great cheese factory in Ohio, converts the milk of about 2500 cows, belonging to farmers in the neighborhood, into the best cheese, by labor-saving machinery. The curd is made, sacked, and marked by the farmer, and sent to the factory by a wagon which daily goes the rounds. Eight teams are thus employed. The curd is then weighed; sliced rapidly in a machine; then passed through the double curd-cooking apparatus; then through a machine which cuts it fine to powder, and salts it while passing through. It is then pressed, sacked, and again pressed. A machine sacks 240 cheese per hour. The factory makes 300 cheeses daily, weighing about 5,000 pounds. Nearly 400 tons are turned out yearly.

☞ J. G. C., Jr., of Rhode-Island, will see by reference to another page of this number of the Cultivator, that our State Ag. Society have already prepared to carry his suggestions into operation, and that a trial of reapers, mowing machines, &c., is to be held under its auspices, at Geneva, next month.

Agricultural Journals.—Since our last we have received the following new agricultural journals:

Kentucky Cultivator, Cynthiana—monthly, 8 p. quarto, $1. By J. Atkinson.

Jefferson Farmer, Sacket's Harbor, N. Y. Agricultural and Miscellaneous—weekly, at $1. O. H. Harris, editor and proprietor.

Farmer and Artisan, Keokuk, Iowa—monthly, at 50 cents—by our correspondent, W. G. Edmundson.

The Farmer's Journal, Bath, N. C.—monthly, at $1. John F. Tompkins, M. D., editor and proprietor.

Importation of Sheep.—We see by the papers, that S W. Jewett, Esq., of Middlebury, Vt., has just returned from Europe, with a flock of 160 sheep, in charge of a Spanish shepherd. It is stated that one of the bucks cost $900, and would shear 24 lbs. wool.

Mr. Avery's Sheep.—In our last No., p. 186, Mr. Avery states that Mr. Hull, (from whose flock his sheep were procured,) "purchased his stock of the Hon. Wm. Jarvis." "A Subscriber" wishes to be informed as to what Mr. A. means by "his stock"—that is, he wishes to know whether Mr. Hull's purchase consisted of ewes and bucks; and if so, how many of each. The writer says—"If, on further inquiry, it should appear that Mr. Hull's flock were not from Mr. Jarvis, then Mr. Avery's description of the Paular Merinoes, as given by Mr. Jarvis, will not fit his flock." If the writer will turn to Mr. Avery's article, he will see that he only claims that his flock "nearly" answer the description of Mr. J., and then states wherein they differ.

Prize Plows at World's Fair.—A writer in the *Farmer's Herald*, (*British*,) after commenting rather severely on the clumsy Belgian and French plows, which drew prizes, and which he shows are the same in important points, as old English implements, adds, "A complete contrast to these foreign monstrosities was shown in the plows of the United States. Here lightness in a degree to that shown by any, even of English manufacture, was shown."

Importation of Cattle.—"The Ohio Company for the importation of improved English cattle," was organised in the Scioto valley, in November last. The sum of $15,000 having been raised, Arthur Watts and Geo. W. Renick, Esqs., have been appointed agents to visit England to make the purchases, for which purpose they have recently sailed for Liverpool.

Green-Crop Manure.—A correspondent of the Germantown Telegraph states that he sowed with buckwheat a piece of plowed sward ground, so poor as not to repay the expense of tillage. It was plowed just as the grass was in blossom, rolled, and harrowed thoroughly, before the buckwheat was sown. When the latter was in blossom, it was rolled, and then plowed in, and again rolled. The next spring it was limed lightly and sown with oats. The two preceding green crops had so restored the soil, that the oats were remarkably fine.

☞ A correspondent informs us that Bremen Geese, and Aylesbury Ducks, can be had of John Giles, Esq., Providence, R. I.

Plaster on Wheat.—The following successful experiment in the application of plaster to wheat before plowing the ground, we abridge from Moore's New-Yorker: "In June, before breaking up the ground to summer fallow, one-half of an eight acre field was sown with plaster, at the rate of a bushel per acre. The ground was plowed three times to kill Canada thistles, and the wheat sown the first of September. The following April the same quantity of plaster was sown on the other half of the field. The result was strongly in favor of the part first plastered, the wheat being of a brighter and better color, of a better growth, and thicker on the ground—the other being every way inferior. The clover was also much larger and thicker on the ground plastered before plowing. [The experiment would have been more interesting if the results had been submitted to accurate weighing and measuring. It is well worthy of repetition, as bearing on the question, whether plaster, like other manures, is most efficacious when thoroughly mixed with the soil.]

Oats cut green.—Samuel Williams, of Waterloo, N. Y., gives in the Gen. Farmer the management of a farmer who stables his cows six months in the year, making most of his manure by composting, and who says that nothing exhausts the soil so little, that pays so well in a dry season when hay is short, as *oats cut in the milk* for winter fodder, particularly for sheep. We think if he should also adopt the practice of sowing corn very thickly in furrows three feet apart, he would regard the crop as even less exhausting, and possessing great value for feeding green or dried, to cattle.

Wheat on Clover.—A heavy crop of wheat, yielding forty-seven bushels per acre, on seven acres, was raised by M. C. Crapsey of Lockport, on inverted clover sod, as reported in the Rural New-Yorker. The clover was inverted in August, eight inches deep, the soil rolled hard, harrowed, and cultivated, expending on each acre about $5.00 worth of labor, after which 1½ bushels of Soule's wheat was sown per acre, harrowed, and rolled, at $2.25 per acre—harvesting and drawing $2.50; threshing and marketing, $4.23; interest on land, $7.00, making all the expenses $20.98 per acre. The wheat sold at 80 cents per bushel, or $37.60 per acre—profit, $16.62 per acre.

Liquid Manure.—W. Isham, of the Michigan Farmer states, "A farmer in the neighborhood of Bath, (England,) informed me that he had a cistern which held ten hogsheads, into which his liquid manure was all drained from the stable, and from the dung heap in the yard, and that he had found it far better for his crops than the solid part."

Milk and Railroads.—A farmer in Massachusetts, some 25 miles from Boston, sold the milk of seven common good cows at the depot near his residence, for city market, at nine cents per gallon in summer and at eleven cents per gallon in winter, besides a small portion consumed at home, and made into butter. The proceeds were $325, or $46.43 to each cow.

☞ The plans of Barns, furnished by Mr. TAFT, and Chester County, are still in the hands of the engraver. We shall publish one in our next, and the other in the succeeding number.

AMERICAN INSTITUTE.—The annual election for officers of the American Institute, took place on the 13th of May, at the Institute building in New-York. The sum total of votes cast, was 357, of which over 200 were for the following ticket:—

President—JAMES TALLMADGE.
Vice-Presidents—Robert Lovett, Robert L. Pell, George Bacon.
Rec. Secretary—Henry Meigs.
Cor. Secretary and Agent—Adoniram Chandler.
Treasurer—Edward T. Backhouse.
The Committees, managers, &c., of last year were all re-elected.

INCREASE IN ONE SEASON.—It is stated by Boussingault that a beet seed weighing but the fraction of a grain, has produced a beet in one season weighing one hundred and sixty-two thousand grains, or twenty-eight pounds. Perhaps one of the largest amounts of increase for centuries, is that of the great Californian pines, over two hundred feet high, and six or eight feet in diameter, from a minute scaly seed from the cone.

WEEDS IN GRAVEL WALKS.—Gas tar is very cheap. It is used in England to exclude weeds from gravel-walks. The walk is rolled hard, the tar applied with a brush, and then the whole is covered with a thin coat of gravel. We have observed where common tar was spilled accidentally on sand, it formed a hard and impenetrable compound, which no plant could grow through, and which the frost would not crumble. Possibly gas tar might be used to advantage in a similar way,—that is, by forming a compound with sand, and giving the walk a coating.

LIMITED DURATION OF VARIETIES.—Dr. Lee remarks, on this subject, "It is better to have no theory at all, than one which, if not evidently erroneous, is more than doubtful." He asks why seedling potatoes [young varieties] are as subject to the rot as old ones—why seedling onions, cabbages, and carrots, often rot prematurely at the south—the indications which are pointed to as proof of the feebleness of old age in varieties propagated for a long time by eyes or buds.

WEIGHT OF LIMESTONE.—A bushel of unburnt limestone weighs 142 pounds; a bushel fresh from the burnt kiln 75 lbs. Showing the economy of first burning before drawing to any considerable distance. Quicklime begins immediately to re-absorb the carbonic gas, hence the economy of drawing lime when as fresh as possible, as after a while a ton will thus become a ton and a half.

Clarke's Excelsior Churn,

OF various forms and sizes, will be furnished to dairymen, throughout the United States, at prices ranging from $2 50 to $10. The sizes generally preferred, with iron axles, crank and gearing, will be delivered at Utica, for Canal or Railroad, at $7.00 and $10 each. No extra charge is made for the perfect tempering apparatus which goes with every Excelsior Churn. Three or more thirty gallon milk churns in one frame, for horse power, is offered at about $5 per cylinder. Orders from distant places should enclose payment. Agents wanted to sell state and county rights. Circulars giving full information, terms to agents, &c, will be sent gratuitously to all who apply at any time post-paid, to the proprietor. GEO B. CLARKE,
June 1, 1852—2t.* Leonardsville, Madison Co., N. Y.

Albany Prices Current.

ALBANY, May 14.

FLOUR.—The receipt of produce by canal this season, so far, has been comparatively light. This is owing mainly to the late opening of the Lake at Buffalo. Prices maintain considerable uniformity in this market; the demand for the home and eastern trade has been steady. At New-York, the shipping demand for flour has continued good, and the market at that point, has been pretty well cleared of the inferior and low grades. The sales during the last month are, 28,000 to 30,000 brls., closing at $4a4.12½ for common State, $4.00a4.12½ for common Ind., $4.25 for round hooped Ohio, $4.25a4.50 for straight State and Michigan, $4.87½ for Indiana, $4.75a5 for fancy State, $5.25 for extra Ind., and $5a5.50 for extra Genesee.

The demand for Corn meal is good at $1.18¾a$1.25, principally at $1.22.

GRAIN.—The demand for prime Genesee wheat, at this market, is good, and all offering is rapidly taken at the extreme quotations of New-York; prime samples of Michigan wheat are also in demand and scarce; the inferior grades of Western wheat are unsaleable here; the transactions of the month add up 60,000 bushels, at 110c. for prime samples of Genesee, 108c. for fair samples do., 100c. for prime white Michigan, 96a98c. for Mediterranean, and 97c. for ordinary Michigan. The sales of Rye are only 3,000 bushels in lots, at 73c. Oats have ruled at 40a42c., the last sale was at 41c. with some lots in market for which higher rates were asked; the sales are 66,000 bushels. The market is now entirely swept of all the Barley left here at the close of navigation; the sale was made on Tuesday at 71c. from store; the sales during the month are only 31,000 bushels —all from store; a sample of a large parcel of Wisconsin Barley, was offered on Tuesday last, but we heard of no offer being made for it—the season is too far advanced. Corn, the growth of this State comes forward in very indifferent order; the great bulk of the receipts so far, are only partially cured, and but little of it is in sound shipping condition; the consequence is that it rules lower than Western, which, so far, is in good order. Within a few days the receipts have been light and the market firm at 60a61c. for yellow round, and 61c. for Western mixed; some refusing to sell the latter description, to arrive, at the higher rate; the sales since the opening of the Canal, add up 190,000 bushels.

SALT.—The only sale reported is 7,000 bags at 8 and 10c. per small and large.

HOPS —In retail demand only, at 23c, for Western.

SEED.—The business is nearly over; the sales are limited at 7⅛a7¼ for medium Clover. Timothy, $2a$3.

FEED.—The sales are only 26,000 bushels, principally fine middlings at 103a110¼c. per 100 lbs., 95c. per 100 lbs. for fine shorts, and 25c. for 24 lbs, feed.

PROVISIONS.—The business is confined to a retail demand at steady rates. We quote mess pork at $19, clear do $20a20.50, prime do. $17. Mess beef $10a10.50; smoked beef 9½c., do hams 11½a12c., do shoulders 9c. Lard 10a11c. and scarce. Butter, 18a20c. for Western and State. Cheese scarce at 8a9c.

WOOL.—We have no sales to report in this market. The market is bare of fleece and there is but little pulled on hand. The sales at Troy for the week ending May 8th, were 57,000 lbs.

20,000	lbs.	Full blood and Saxony,	42½ cents.
25,000	"	½ and ¾ blood,	39 "
2,500	"	¾ do	40 "
3,000	"	½ and ¾ do	37½
4,000	"	¼ and native,	33¾
3,000	"	Extra Pulled,	39
57,500			

Receipts of the week are about equal to the sales, leaving the stock on hand for sale about 400,000 lbs. of every kind and grade of American wools.

Kinderhook Wool Depot.

THE subscribers continue the business of receiving and selling wool on commission. Several years experience, an extended acquaintance with Manufacturers, and increased facilities for storing and making advances on wool, will enable them, it is believed, to give satisfaction to those who may favor them with consignments.

All who desire it, can have their clips kept separate.

Their charges for receiving, sorting, and selling, will be ONE AND A HALF CENTS PER POUND, and insurance at the rate of 25 cents on $100 worth of wool for each term of three months and under.

Kinderkook, June 1, 1852—3t. H. BLANCHARD & CO.

Emery & Co.'s Patent Horse Power & Thrashers.

THE undersigned have been appointed sole agents for the sale of their valuable Powers and Thrashers in the city of New-York, where a large assortment may be found at the manufacturers prices.

LONGETT & GRIFFING,
June 1—1t. No. 25 Cliff Street, New-York.

Superphosphate of Lime,

FOR sale in quantities to suit purchasers—warranted pure; price, 2½ cents per pound. LONGETT & CRIFFING,
June 1—1t. 25 Cliff Street, New-York.

Prouty and Mears' Plows.

A LARGE assortment can be found at the State Agricultural Warehouse. LONGETT & GRIFFING,
June 1—1t 25 Cliff Street, New-York.

A Valuable Farm for Sale,

CONTAINING 400 acres of excellent land, 260 of which is well improved. There are on the premises a good Dwelling-house, Carriage-house, 15 good Barns, with stone basements under four of them, for stabling; an excellent Orchard of grafted fruit; is well adapted to grain or grass, and can easily be harvested by machinery. Said farm is situated one mile south of Caroline Centre, Tompkins county, N. Y., and within a short distance of several good markets.

Terms, $30 per acre, one half can remain on security if desired.
June 1—1t.* T. M. BOYER, Caroline Centre, N. Y.

MORGAN HORSES.

ONE Black Hawk Horse six years old, and one of the Morgan and Messenger stock, four years old this spring, will stand the ensuing season (for a limited number of mares,) at the farm of Moses Lyman, two miles south-west from Goshen Village. They are both superior horses, possessing great bone and muscle. Their color, a beautiful black.

Breeders of horses are invited to call and judge for themselves.

SILAS BENEDICT, Jr.
Goshen, Connecticut, June 1, 1852—2t.*

THE ORIGINAL BLACK HAWK.

THIS celebrated horse will stand this season at the stable of the subscriber, in Bridport, Addison County, Vermont.

To the Patrons of Black Hawk.—It is proposed by the owner, that the horse shall serve a limited number of mares for this season—and those who would like to secure the services of the horse, will please send to the agent their names, (by letter or otherwise,) as those sending first, will be first served.

Good keeping will be provided for mares from a distance—and all *accidents, escapes and thefts*, will be at the risk of the owner.

N. B—Terms for the use of said horse will be, for the *season*, $40, payable in cash or satisfactory notes, on demand, with interest; and all demands for *past services*, of *Black Hawk*, and *Post Boy Morgan*, must be immediately paid to David Hill, who is alone authorised to settle the same. D. EDGAR HILL, Agent.
Bridport, Addison Co., Vt., June 1, 1852—2t.

Kell's Improved Horse Powers and Threshers.

WHITE & PRENTISS, successors to Philip H. Kells, would respectfully inform the public that they are now manufacturing Horse Powers, Thrashing Machines, &c., with the valuable improvements made by Philip H. Kells, and solicit the call of such as wish to purchase single or double RAILWAY HORSE POWERS, SEPARATORS, OVER OR UNDER SHOT THRASHING MACHINES, of the latest and most approved construction, and of the best workmanship and materials. From their enlarged and improved facilities for carrying on the business the subscribers are confident they can supply customers with as good work, and on as liberal terms, for cash, as any other establishment in this state.

Orders from any part of this or other states, will be immediately attended to, and promptly supplied. Hudson, June 1, 1852—3t.*

The Columbia Agricultural Machine Shop,

Chatham Four Corners, Columbia co., New-York.

FARMERS take notice, and examine the latest Patent Improved Railroad Chain Horse Power, for which a Patent was granted March 2d, 1852.

The subscriber having spent a great deal of time and money in making improvements on the above Power, which will add to its durability and the farmer's interest; at the same time being perfectly simple and the wear equally distributed among the working parts, and the friction reduced by so doing, the wear is less on any one part.

The subscriber having been in the Horse Power and Threshing Machine business since 1838, and from the experience he has had, flatters himself that he will be able to give satisfaction to all who may tender him their patronage. He will also manufacture

Ploughs, Cultivators, Hay and Straw Cutters,

to work both by hand and horse power, and will make MORTISING MACHINES for Carpenter's use, SAW MILLS for Farmers and Railroad use.

☞ All persons desirous of procuring Horse Power and Threshing Machines would do well to call and examine my improved power and Under Shot Thresher, with Revolving Separator, before purchasing elsewhere.

P. S.—Terms of Sale, Cash; and all machines made and sold by me are warranted to give satisfaction or may be returned after a reasonable time for trial, and the purchase money refunded.

THEODORE SHARP,
June 1—1t. Chatham Four Corners.

McCormick's Reaping and Mowing Machine.

Washington, April 10, 1852.

IN offering my Reaping and Mowing Machine to the farmers of the country for the next harvest, from the many flattering notices that have been taken of it during the past year, by the press generally, it is necessary to add but little in relation to its merits at this time. In addition to the "Great Medal" awarded by the "*Council of Chairmen* of the Great Exhibition of all Nations," in London—the award made after two trials with Hussey's machine, (and one made with an English Machine, made on the plan of Hussey's,—one made in cutting heavy green wheat, and the other in cutting ripe wheat in a fair condition for harvesting—the first premiums or medals of the State Agricultural Societies of Wisconsin, Michigan, New-York, and Pennsylvania, and of the Franklin Institute of Philadelphia, have been awarded for the same during the last fall; and also the gold medal of the "Chicago Mechanics' Institute," for the "best reaping and *mowing* machine," after a trial by its committee in cutting "*prairie grass*, in competition with Ruggs and Danford's. It is only necessary to add, that this machine has been considerably improved during the last summer, and is now warranted to operate as well in cutting *grass as grain*—the *additional mowing attachment*, with a separate sickle, and some other *extras*, only costing $30, or $25 if paid in cash. As a further admonition both to *infringers* and *farmers*, I have to say that while Seymour & Morgan are going on to manufacture more reapers. they have made no provision to pay the judgment against them for $17,306; and another suit for infringement in the manufacture of five hundred reapers since the commencement of the first, is about to be brought against them—and that, *if they fail to pay the damages*, the *purchasers* are not only *liable*, but may at any time, *and will be sued for the same*. These machines are not only improved in construction, but are being manufactured in a style commensurate with their extended reputation, and more expensively than ever before, being determined that that reputation shall be sustained. The price of the Reaper alone, as heretofore, is $105 in cash, or $110, part cash and part on time, delivered in Buffalo or Rochester. And it is warranted, as usual, to cut one and a half acres of grain per hour; and the mowing machine one acre per hour, and on smooth land to do the cutting as well as is done by ordinary mowing. Mowing attachments for old reapers, being more expensively constructed, will cost $55, as heretofore. C. H. McCORMICK.
June 1—1t.

The Waterbury Morgan Stock Company,

HAVING procured two of the purest blooded MORGAN STALLIONS, for the improvement of Stock in this vicinity, offer the services of these horses for the coming season.

GREEN MOUNTAIN MORGAN will be five years old the 10th of June, 1852; was sired by Old Green Mountain Morgan, and he by Old Gifford Morgan; his dam was sired by Old Sherman Morgan. His color is a beautiful dapple chestnut.

GIFFORD MORGAN will be four years old the 3d day of September next; was sired by Old Gifford Morgan; his dam Lady Walpole, was sired by Post Boy, and he by Old Sherman Morgan.

Green Mountain Morgan and Gifford Morgan, will stand at the stable of Col. R. Welton, in Waterbury Center, for the season.

TERMS—$10 to insure with foal. Mares disposed of before the usual time of foaling, will be considered in foal, and charged accordingly. COL. R. WELTON, Agent.
June 1, 1852—1t.*

United States Agricultural Warehouse and Seed Store,

JOHN MAYHER, & CO,

No. 197 *and* 550 *Water Street, New-York.*

THE subscribers solicit the attention of the public to the large and varied assortment of Agricultural and Horticultural Implements, Field and Garden Seeds, which they have constantly on hand and offer for sale at the lowest prices, and on the best terms. Among which may be found the following, viz:

PLOWS of every size and pattern now in use, and adapted to every kind of soil, and different modes of culture. Also the genuine Eagle D. and F. Plows, which have always taken the premium wherever tried or tested.

HARROWS, Geddes, Scotch, Triangular, and square harrows of different sizes.

FIELD and GARDEN ROLLERS, with cast iron sections of one and two feet, and can be easily arranged on a shaft for any desired width.

CULTIVATORS—Thirty different kinds and sizes, wire and wrought iron, and steel teeth.

SEED SOWERS, a great variety for man and horse power, that will plant all kinds of seed, at any required distance apart.

CORN SHELLERS—Single and double, to be worked by man or other power; also a new style recently got up, that exceeds all others in use.

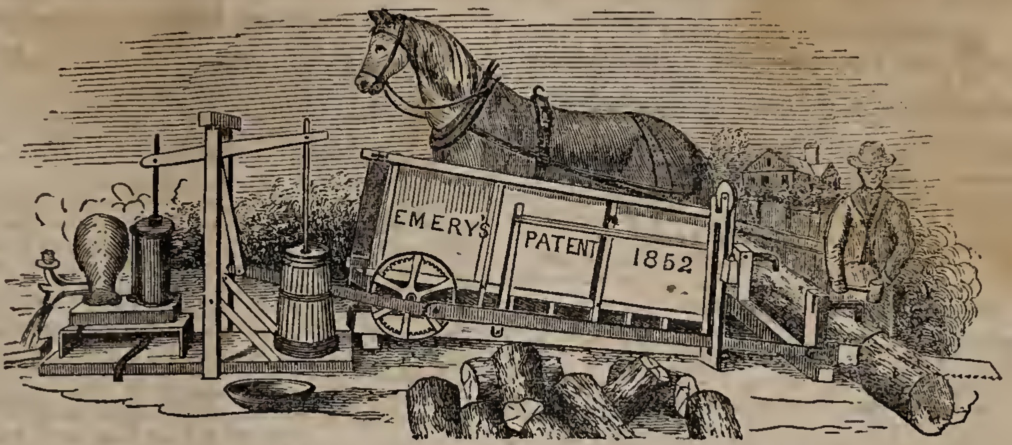
STRAW CUTTERS, with spiral, straight, and circular knives.

HORSE POWERS—Endless chain and sweep powers, made of wood, wrought and cast iron.

THRESHERS—Of all styles and sizes, with or without Separators.

GRAIN MILLS, with cast iron and steel plates; also Burr Stone Mills, to be worked by man or horse power.

Among our assortment may be found every article necessary for the Farm, Plantation and Garden, such as hoes, rakes, spades, shovels, scythes, snathes, grain cradles, hay and manure forks, ox yokes and bows, &c. &c. Connected with our establishment, we have a large Machine Shop and Iron Foundry, employing upwards of one hundred and fifty hands, where we are prepared to make to order any kind of implements in our line. JOHN MAYHER & CO.,
May 1—tf. 197 Water Street, New-York.



EMERY & COMPANY'S

RETAIL PRICE LIST OF HORSE POWERS, THRESHERS, SEPARATORS SAW MILLS,

FEED Mills, Fanning Mills, &c. &c., manufactured by themselves, and delivered on board any conveyances at Albany N. Y., or at any place in the United States, by the addition of freight:

Emery's Patent Changeable Power, Thresher, Separator and Bands complete, for 2 horses,	$150
do do do 1 do	120
Emery's Improved Wide Rack and Pinion, with Thresher, Separator, and Bands, for 2 horses,	120
do do do 1 do	95
Common or Wheeler Rack and Pinion Power, Thresher, Separator, and Bands, for 2 horses,	135
do do do 1 do	110

If sold separately, the following prices are charged:

Emery's Changeable R. R. Horse Power, for 2 horses,	110
do do do do 1 do	80
Emery's Wide Rack and Pinion Power, for 2 horses,	90
do do do do 1 do	60
Common, or Wheeler Rack and Pinion Power, 2 horses,	95
do do do do 1 do	75
Thresher, with cylinder 26 inches long, 14½ in diameter, together with Separator and Fixtures,	35
Fanning Mills with pulleys for Band,	$26, 28, 30
Portable Circular Saw Mill, 24 inch saw, filed and set, for sawing Railroad wood, slitting fencing, &c.,	$35
Upright or Felloe Saw for Wheelrights,	40
Churning attachment, for driving one or two churns at a time, of barrel size, except churns,	12
Sett Bands, Wrenches, Oil Can and Extras,	5
Cross Cut Saw arrangements for butting and cutting off logs, including saw, guides and connections for use	12
Feed Mill, Cast Iron Plates,	35
French Burr Stone Mill, for grinding, 18 inches diameter,	100
" do do do 20 do	125
Power Corn Sheller for 1 or 2 horses,	35 to 50

TERMS, CASH, or approved notes, or acceptances with interest, payable within four months, in Albany, New-York, Boston, Philadelphia, or Baltimore as may best suit the purchaser.

All articles warranted made of good materials, and to operate as represented, or may be returned within three months, at the expense of manufacturers for home transportation, and purchase money refunded—the purchaser being his own judge in each case. For further particulars see previous advertisement, or address the subscribers. Liberal deduction to dealers. Local Agents wanted to sell and put the above in operation.

EMERY & CO.
369 & 371 Broadway, Albany, N. Y.

WHEELER'S Horse Powers, Threshers and Separators, for sale at Manufacturer's Prices, at the Union Agricultural Warehouse and Seedstore, 23 Fulton Street, near Fulton Market, New-York.
May 1—3t.

SUBSOIL PLOWS, recently improved by Prof. J. J. Mapes, together with an assortment of the most approved Plows for Sward, Stubble, and New Land—also Side Hill and Double Mould-board Plows, Cultivators, Harrows, &c., for sale at the Union Agricultural Ware House and Seed Store, RALPH & CO., 23 Fulton
May 1—3t Street, New-York, near Fulton Market.

FAN MILLS, Grain Cradles, Scythes, Field and Garden Rollers, Horse Rakes, Seed Sowers, Road Scrapers, Straw Cutters, with an assortment of Agricultural Implements, and Horticultural tools. For sale by RALPH & CO.,
May 1—3t. No. 23 Fulton street, New-York.

Albany Tile Works.

Corner Patroon and Knox Streets, Albany.

THE subscriber will furnish to Agriculturists, of the most approved patterns, Drain Tile suitable for land drainage, of a superior quality, over one foot in length, 3 to 4½ inches calibre, from $12 to $18 per 1000 pieces. They are formed to admit the water at every joint, draining land from 12 to 20 feet each side of the drain, being the cheapest and most durable article used.

Tile sufficiently large for drains around dwellings, at $4 and $8 per 100 pieces, being cheaper and more durable than brick drains.

The great importance of thorough drainage is daily becoming more apparent. Orders from a distance will receive prompt attention.
March 1—6t A. S. BABCOCK, Albany.

Morgan Horse, Young Black Hawk.

THIS splendid colt will stand at the stable of Irvin D. Remington, in Sennett, Cayuga county, one mile northeast of Throopsville. Season ending in August.

Young Black Hawk is a jet black colt, of good size, and one of the best proportioned and elegant moving colts that can be produced. He was four years old in September, 1851, and took the third premium at our State Fair last fall, held at Rochester, and has taken the first premium at our county fair also. He was sired by old Black Hawk, kept by D. E. Hill, of Bridport, Vermont. His dam was a Messenger, got by old Mambrina—grandam by Plato—he by old Messenger—great grandam by imported Messenger. He comes the nearest to his sire for form and action, of any of his colts, having the old horse's head and neck perfectly.

He will stand for a limited number of mares, at my stable during the week, with the exception of Saturdays, through the season; all are invited to call and see him. Terms, $10 to insure with foal, $8 for the season, $5 for a single leap. Good keeping provided at the risk of the owners.

IRVIN D. REMINGTON,
May 1—2t.* Sennet, Cayuga county, N. Y.

PERUVIAN GUANO

AND other Fertilizers. Several hundred tons of first quality of Peruvian Guano, constantly on hand for sale.

Also, BONE DUST, PLASTER OF PARIS and POUDRETTE.

A. B. ALLEN & CO., 189 and 191,
Water-st., New-York.
Jan. 1—tf.

A First Class Dairy Farm for Sale.

MY farm of 320 acres, four miles south of the village of Oxford, Chenango county, N. Y., and near the Chenango Canal. 250 acres are under high cultivation, durably fenced, and well and permanently watered. The remainder is well timbered. It has a large two story mansion, five large barns, and sheds and out houses, in good repair. The soil is deep and of superior quality. It is admirably adapted for a dairy, or for grazing and grain; has a fine orchard of choice grafted fruit; and for profit, health, and beauty of location, cannot be surpassed. It is fully supplied with farming tools, and about fifty head of cows and young stock, all or any of which may be had with the farm. The New-York and Erie Railroad furnishes ample facilities for forwarding produce to the New-York market at all seasons, and the route of the contemplated Albany and Binghampton railway, passes within a few miles of the farm. The farm can be conveniently divided. Price low—title perfect. Terms most easy.

G. VAN DER LYN,
May 1, 1852—tf. Oxford, N. Y.

Albany Drain Tile Works.

No 60 Lancaster Street—West of Medical College, Albany.

THE subscriber has now on hand, Draining Tile of the following descriptions. Prices reduced.

HORSE SHOE TILE.

5½ inch Rise, or 4½ inch Calibre,	$18 00 pr. 1000.
4½ " " 3½ "	15 00 "
3½ " " 2¾ "	12 00 "

SOLE TILE.

4½ inch Rise, or 3½ inch Calibre,	$18 00 pr. 1000.
3½ " " 2¾ "	12 00 "

These Tile are over one foot in length, and are so formed as to admit water at every joint, draining land from 12 to 20 feet each side of the drain—being the cheapest and most durable article used.

Tile sufficiently large for drains around dwellings, at $4 and $8 pr. 100 pieces. Orders from a distance will receive prompt attention.
Albany, April 1, 1852—tf. JOHN GOTT.

Colman's European Agriculture.

EUROPEAN AGRICULTURE, from personal observation, by HENRY COLMAN, of Massachusetts. Two large octavo vols. Price, when neatly bound, the same as published in Nos., $5. For sale at the office of THE CULTIVATOR.

Improved Stock.

CATTLE, of the Durham, Devon, Hereford, Alderney, and Ayrshire breeds.

SHEEP, of the Native and French Merino, Saxony, South-Down, and Cotswold.

PIGS of the Lincoln, Suffolk, and Berkshire breeds.

From our long experience as breeders and dealers in the above kinds of stock, and our excellent situation for purchasing and shipping, we think we can do as good justice to orders, as any other house in the United States. A B. ALLEN & CO ,
Jan. 1, 1852—tf. 189 and 191 Water st., New-York.

Imported Consternation.

THIS celebrated thoroughbred horse will stand, this season, as heretofore, at the farm of the subscriber near Syracuse. Terms $10, payable in advance, for which a receipt will be given, promising to refund the money, if the mare is proved not to have got in foal, and provided also she is left with the subscriber, or regularly returned to the horse during the season, or until the groom is satisfied she is in foal. Pasturage of the best character furnished at 3s. per week. No mares taken except at the risk of the owners, in all respects.

Syracuse, April 1, 1852—3t. J B. BURNET.

Horse Gifford Morgan,

WILL stand, for a limited number of mares, the present season, at the Farm of the subscriber, within five minutes drive of Union Village, Washington co., N. Y., and at the same stable with Morgan Horse Trustee.

Gifford Morgan, was bred by Wm. Arnold of Walpole, N. H. He is three years old the 24th day of May, 1852—is a horse of splendid form and action, and a perfect pattern of his celebrated sire. His color is a beautiful dapple chestnut. He was sired by the old Gifford Morgan. His dam is one of the best mares in that section of country, and whose colts invariably bring exorbitant prices.

Terms $10, to ensure a fold. Mares disposed of before the usual time of foaling, will be considered in foal and charged accordingly.

LE ROY MOWRY,
April 1—3t. Greenwich P. O., Washington co., N. Y.

MorganHorse Trustee.

THIS horse will stand, (for a limited number of mares,) the present season, at the Farm of the subscriber, within five minutes drive of Union Village, Washington county, N. Y.

Pedigree of Morgan Trustee.

Sired by the old Gifford Morgan—gr. sire, the Woodbury or Burbank Morgan—gt. gr. sire, the original Justin Morgan horse.

His dam was sired by old Morgan Bulrush—his gr. dam by Morgan Fortune—his gt. gr. dam by the original Justin Morgan.

The dam of Morgan Fortune was sired by the original Justin Morgan.

CERTIFICATE.—We hereby certify the above to be a correct pedigree of Morgan Horse Trustee, bred by us. and this day sold to Mr. Mowry of Washington county, N. Y. Signed, Walpole, N. H., March 5th, 1852.

FREDERICK VOSE.
BENJAMIN GATES.

It will therefore be seen that Morgan Trustee is of exactly the same degree of Morgan blood, as was the old Gifford Morgan. The old Gifford being dead, Trustee is the highest blooded Morgan stud now living.

He is a dark mahogany bay color, with black main and tail; of fine form and action, and will be four years old the 16th day of May, 1852. Terms $10 to ensure a foal.

Mares disposed of before the usual time of foaling, will be considered in foal, and charged accordingly. LE ROY MOWRY,
April 1—3t. Greenwich P. O., Washington co., N. Y.

Devon Bulls for Sale.

THE subscriber offers for sale, two young Devon bulls, called "Washington" and "Ajax."

Washington was dropped the 28th March, 1851. Sire, bull Molton —grand sire, celebrated bull Major, bred by R. C. Gapper, and now owned by Lewis G. Morris, Esq. Major took the first premium at the State Fair at Albany, in 1850—and is admitted to be the best Devon bull ever brought into the United States.

Dam of Washington, cow Beauty—grand dam, cow Sophia—both bred by Ambrose Stevens, Esq., and both received the highest premiums in their respective classes at the State Society's Shows, in 1849 and 1850.

Bull Ajax, was dropped the 7th of August, 1851. Sire, bull Molton —dam, cow Ruby.

Ruby was bred by Mr. Cowles of Farmington, Ct., and was sired by bull Rover, bred by Lewis F. Alllen, Esq., Black Rock.

Price for Washington $75, for Ajax $50, or will be exchanged for Heifers of equal age and pedigree. Address the subscriber at Greenwich, Washingtonco., N. Y. LE ROY MOWRY.
April 1—3t.

EMERY & CO.'S Horse Powers and Threshers, for sale at Manufacturer's Prices, by RALPH & CO., 23 Fulton Street, New-York. May 1—3t.

STOVES.

THE subscribers are prepared to furnish dealers with a full assortment of PARLOR and COOKING STOVES for coal and wood, on liberal terms.

Circulars giving particulars can be had on application.

JAGGER, TREADWELL & PERRY.
Eagle Foundry, No. 110 Beaver st., Albany, N. Y.
ay 1, 1852—6t.

New and Important Insurance.

Northern N. York Live Stock Ins. Co., Plattsburgh N. Y.

INCORPORATED by the Legislature of the State of New-York, July, 1851. Horses, Cattle, and all kinds of Live Stock insured against Death, by the combined risks of Fire, Water, Accidents, Diseases, &c. CAPITAL, $50,000.

DIRECTORS.

James Farr,	Washington county.	Amasa C. Moore,	Clinton county.
Joseph Potter,	do	John Boynton,	do
Olif Abell,	do	Zephaniah C. Platt,	do
Pelatiah Richards,	Warren co.	Cornelius Halsey,	do
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John Horton,	St. Lawrence co.	George Moore,	do
Thomas Conkey,	do	Henry G. Hewitt,	do

JAMES FARR, President. G. MOORE, Plattsburgh, Sec'y
A. C. MOORE, Vice-Pest. Z. C. PLATT, do Treas.
I. C. MIX, Port Ann, Gen. Agent.
October 13, 1851.

This company are now organized and ready to receive applications for insurance. It is confidently believed that the owners of valuable animals will avail themselves of the advantages offered by this mode of protection. If fire; life and marine insurances are proper and expedient, so is live stock insurance: the reasons for insurance are equally applicable to all.

The company have adopted such rates as, they believe, will furnish the means of paying ordinary losses, without resort to an assessment. But to guard against extraordinary losses, which may arise from contagious diseases or epidemics, it becomes necessary to require premium notes.

To the Owners of Horses and Live stock.

Office of the Northern New-York Live Stock Ins. Co.,
PLATTSBURGH, August 16, 1851.

The Directors of the above Company, incorporated by the Legislature of the State of New-York, at its extra session in July, 1851, respectfully request your attention to the following facts bearing on this subject.

1st. Value of this class of property. By the census of 1845, there were at that time in the State of New-York, as follows:

Horses,	
One-half a million,	505,155
Neat Cattle,	
Over two millions,	2,072,330
Cows milked,	
Nearly a million,	999,490
Sheep,	
Over six millions,	6,443,855
Hogs,	
Over one million and a half,	1,584,344

Without making any estimate of the value of this property, it is apparent that it is immense; extending to every inhabited spot, and essential to the health and comfort, almost to the existence of the inhabitants.

2d. These animals are subject to disease and accident. It is asserted by a Vermont Company, engaged in the Live Stock Insurance, as a fact which cannot be disputed, that the aggregate loss upon this species of property throughout New-England, is *greater* than the losses by fire; at all events, it is a fact undoubted that the annual loss is very great, and the owner is left unprovided with any means of security against the hazard incident to this description of property.

3d. The knowledge of this risk is one of the leading hindrances to improvement in the breed of that useful and noble animal, the horse.

Men of capital are slow to invest large sums in a valuable animal, whose loss they must every day risk, to the amount often from five hundred to a thousand dollars, in every valuable breeding horse.

With the ample security to be afforded by sound Insurance Companies, the investment of capital in horses and live stock may be made as safe and safer than the carrying of freight on the seas and inland waters. Marine Insurance has rendered this last business steady and profitable; while without it, it would want the confidence which that branch of business now commands. The absence of this Insurance in the case of live stock is universally felt, while the owner of real estate can command half or two-thirds of its value when needed for an emergency.

While the owner of the ship, "the play thing of the wind and waves," may obtain any reasonable advance; the owner of equally valuable property, invested in horses and cattle, cannot obtain a dollar. The only exception being fat cattle destined for market. In vain does the owner of the horse appeal to his industry or usefulness. The answer is, that his property is liable to disease and accident, and that as security it is utterly worthless.

4th. The Insurance principle comes in, and does for him what Life Insurance has done for the young beginner in trade, taking away the risk arising from the uncertainty of life.

It will do for him what Fire Insurance has done for the owner of personal property; placing him nearly on a level with the owner of real estate.

Your aid is respectfully solicited in behalf of this company, the first chartered in this state for this object. The Directors intend it shall be prudently conducted, and one which shall deserve the confidence of the public.

Terms of insurance will be furnished by the agents of the company.

GEORGE MOORE, Secretary. JAMES FARR, President.
Dec. 1—6t.

Agricultural Books

OF all kinds, for sale at the Cultivator Office, 407 Broadway, Albany.

Lewis G. Morris's Third Annual Sale,

BY AUCTION, OF

IMPROVED BREEDS OF DOMESTC ANIMALS,

WILL take place at MOUNT FORDHAM, Westchester Co., (11 miles from City Hall, New-York,) on WEDNESDAY, JUNE 9, 1852. JAMES M. MILLER, Auctioneer.

Application need not be made at private sale, as I decline in all cases, so as to make it an object for persons at a distance to attend. Sale positive to the highest bidder, without reserve.

Numbering about fifty head of Horned Stock, including a variety of ages and sex, consisting of *Pure Bred Short-Horns, Devons, and Ayrshires; South Down Buck Lambs*, and a very few *Ewes; Suffolk and Essex Swine.* Catalogues, with full Pedigrees, &c., &c., will be ready for delivery on the first of May—to be obtained from the subscriber, or at the offices of any of the principal Agricultural Journals or Stores in the Union. This sale will offer the best opportunity to obtain very fine animals I have ever given, as I shall reduce my herd lower than ever before, contemplating a trip to Europe to be absent a year, and shall not have another sale until 1854.

It will be seen by reference to the proceedings of our State Agricultural Society, that I was the most successful exhibitor of Domestic Animals at the late State Fair.

I will also offer a new feature to American Breeders—one which works well in Europe; that is, *letting* the *services* of *male animals;* and will solicit propositions from such as see fit to try it. CONDITIONS.—The animal hired will be at the risk of the owner, unless by some positive neglect or carelessness of the hirer; the expense of transportation to and from, to be borne jointly; the term of letting to be one year or less, as parties agree; price to be adjusted by parties —to be paid in advance, when the Bull is taken away; circumstances would vary the price; animal to be kept in accordance with instructions of owner, before taking him away.

I offer on the foregoing conditions, three celebrated prize Bulls—"MAJOR," a Devon, nine years old; "LAMARTINE," Short-horn, four years old; LORD ERYHOLME," Short-horn, three years old. Pedigrees will be given in Catalogues.

At the time of my sale, (and I would not part with them before) I shall have secured two or three yearly setts of their progeny; and as I shall send out in August next, a new importation of male animals, I shall not want the services of either of these next year. I would not sell them, as I wish to keep control of their propagating qualities hereafter.

I also have one imported Buck, the prize winner at Rochester last fall, imported direct from the celebrated Jonas Webb; and also five yearling Bucks, winners also, bred by me, from Bucks and Ewes imported direct from the above celebrated breeder; they will be let on the same conditions as the Bulls, excepting that I will keep them until the party hiring wishes them, and they must be returned to me on or about Christmas day. By this plan, the party hiring gets rid of the risk and trouble of keeping a Buck the year round. All communications by mail must be prepaid, and I will prepay the answers.

Mount Fordham, April, 1852—3t. L. G. MORRIS.

FOWLS AND EGGS.

THE great desire manifested in New-England for procuring good Poultry, has induced H. B. COFFIN, *Newton, Mass.*, to pay particular attention to breeding and importing first rate stock. All persons desirous of having the purest and best to breed from, may depend upon being faithfully served. Among many kinds of Fowls for sale by him, are the following, which he is very particular in breeding.

Shanghae—Forbes stock.
Imperial Chinese—Marsh stock.
Chittagongs.
Royal Cochin China.
Black Shanghae.
Burmah Pootras.
White Shanghais.

Dealers in Fowls or Eggs for hatching, supplied upon liberal terms. Orders addressed to *No. 40 State Street, Boston*, will be promptly executed.

Reference to Mr. J. VAN DUSEN, of Cincinnati, Ohio, who will take orders for Fowls, as advertised above.

Boston, Aug. 1, 1851—12t.

TO FARMERS.---POUDRETTE.

THE LODI MANUFACTURING COMPANY having enlarged their works, are prepared now to receive and fill orders for Poudrette with dispatch, and in all cases with a *freshly manufactured article*, at their usual prices, $1,50 per barrel for any quantity over six barrels, 3 barrels for $5.—$2 for a single barrel, delivered free of cartage on board of vessel or elsewhere, in the city of New-York.

The Company refer to their pamphlet (furnished gratis) for hundreds of certificates as to the efficacy, cheapness, and superiority in all respects of their Poudrette over any other known manure for raising a crop of corn—also to A. J. Downing, Esq., B. M. Watson, Esq., Hon. J. P. Cushing, J. M. Thorburn & Co., and many others as to excellency as a manure for flowers and trees, and the following from Hon. Daniel Webster, Secretary of State:

WASHINGTON, March 19, 1850.

"If I neglect the annual purchase of some af this article, my gardenerer is sure to remind me of it. He thinks it almost indispensable, within his garden fence; but there are uses, outside the garden, for which it is highly valuable, and cheaper, I think, than any other manure at your prices. A principal one, is the enrichment of lawns and pleasure grounds, in grass, where the object is to produce a fresh and vigorous growth in the Spring. Our practice is to apply it, when we go to town in the Autumn, and we have never failed to see its effects in the Spring."

All communications addressed to the "LODI MANUFACTURING COMPANY, 71 Cortlandt street, New-York," will meet with prompt attention. Jan. 1, 1852—6t.

Great Sale of Short-horn Cattle in 1852.

THE subscriber, contemplating some important changes and improvements upon his farm, will sell, *without reserve*, his entire herd of thorough bred, and high grade Short-horn cattle, consisting of upwards of ONE HUNDRED head of Cows, Heifers, Bulls, and Bull and Heifer calves.

This valuable herd of cattle has been nearly all bred by the subscriber, on his farm, and under his own eye, with a particular view to their milking quality, which he believes he has been successful in developing to a degree not excelled in any herd of cows in the United States. Ever since the year 1834 he has been engaged in breeding Short-horns, in the belief that no cattle kept by the farmers of this country, were equal to them in all their qualities, as dairy and feeding animals, and this belief has been fully confirmed by seventeen years experience.

Commencing with animals selected from the best thorough-bred stocks, then to be found in this country, this herd has been continually added to, and improved by selections from the best imported stock, and their immediate descendants. During the years 1845, '46 and '47, the Short-horn blood of the late celebrated Thomas Bates, of Kirkleavington, England, was resorted to in the use of the imported bull, Duke of Wellington, and of Symmetry, (by Duke of Wellington, out of the imported Bates Cow, Duchess,) belonging to Mr. George Vail, of Troy, N. Y., which bulls were hired of Mr. Vail for three years. The animals of this herd, since grown up, inherit, more or less, of that blood, which is believed by those having opportunity to judge, both in its milking and feeding qualities, to be equal to any other previously imported; and that belief is confirmed by the prices obtained during several years past, for animals descended from that stock.

For the quality of the stock bred by the subscriber, he can, without vanity, refer to the recent Short-horn sales of Messrs. J. F. Sheafe and Lewis G. Morris, in which some of the highest priced animals were immediately descended, or purchased from this herd. The unrivalled cow, "Grace," owned by Messrs. Sherwood and Stevens, and probably the best *fat* cow ever bred in America, described in pages 183 and 184, vol. x., of the American Agriculturist, was bred by the subscriber; and numerous animals in various parts of the United States, the West Indies, and the Canadas, which have sprung from his herd in years past, may be referred to.

In 1850, the imported bull, Duke of Exeter, of the Princess tribe of Short-horns, (for pedigree of which see (10, 152,) vol. ix., of the English Herd Book,) sent out from England for Mr. Sheafe of New-York, by Mr. Stevens, from the distinguished herd of Mr. John Stephenson of Wolviston, England, was purchased and introduced into this herd; and about forty of the cows and heifers are now in calf to him, all of which will be catalogued for the coming sale. In the quality of his flesh, and in the milking excellence of his ancestry, no bull imported in the into the United States can surpass the Duke of Exeter. His own stock, in the hands of several gentlemen in the State of N. York, are confidently referred to as evidence of his value.

The herd now offered for sale for sale will consist of about FIFTY, thorough breds, including cows, heifers, and heifer calves; and probably TEN OR TWELVE young bulls, and bull calves. The remainder, about fifty in number, will comprise young cows—good, proved, milkers—heifers and heifer calves, together with a few superior bull calves, from the best milking cows, of high grade, Shorthorns, with an occasional dash of Devon blood intermixed—the best of useful, family cows.

All the calves, or nearly all, both thorough-bred and grade, will be the get of the Duke of Exeter; and all the cows, and two-year-old heifers will be bulled by him, (if he lives,) previous to the sale; thus will be combined the blood of the Bates, and the Stephenson stocks, comprising as much excellence, both in milk and flesh, as can be found in any animals whatever.

In addition to the stock above enumerated, will be eight thorough bred Herefords—three cows, one two-year-old bull, one yearling bull, and three calves. One of the cows, (Rarity,) was imported by Messrs. Corning and Sotham in 1841. The other cows and calves are her descendants by bulls of the same importation.

Also, two or three Devon bull calves, got by Mr. Ambrose Stevens' imported bull "Candy," bred by Mr. Quartly, of Devonshire, England, and out of cows descended from the herd of the late Earl of Leicester.

Also, two pairs of thorough-bred, six-year-old Short-horn oxen, and two or three pairs matched two and three year old steers.

Also, ten or twelve South Down buck lambs, got by an imported Ram from the celebrated flock of Jonas Webb, of Babraham, England, and out of Ewes descended from the flocks of Mr. Webb, and Mr. Ellman, of Sussex.

The sale will be on the 18th August, on the premises occupied by Peter Gurbranc, at the Homestead farm of Gen. Van Rensselaer, on the Troy Road, two miles above Albany, where the stock will be about ten days previous to the sale.

Catalogues will be ready by 15th June, and forwarded to all post-paid applicants.

For further particulars, inquiries may be made by letter, directed to the subscriber, or to A. B. ALLEN & CO., New-York.

June 1. LEWIS F. ALLEN, Black Rock, N. Y.

WATER WHEELS.

THE subscribers are making with success, Jagger's improved FRENCH TURBINE WATER WHEEL.

Tables showing the power and capacity of the same can be had on application.

JAGGER, TREADWELL & PERRY,
Eagle Foundry and Machine Shop,
No. 110 Beaver st., Albany, N. Y.

May 1, 1852—6t.

THE Transactions of the New-York State Agricultural Society, vols. 1 to 9, for sale at the Office of "THE CULTIVATOR," price $1 per vol.

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TRIAL OF IMPLEMENTS

BY THE

New-York State Agricultural Society,

July, 1852, at the Village of Geneva.

THE trial of Grain Reapers, Mowing Machines, Steam Engines for Farm purposes, Grain Drills, Horse Powers, Flax and Hemp Dressing Machines, Thrashers, Seed Planters, Cultivators and Broadcast Sowers, will take place at Geneva, between the 12th and 26th of July next. The particular day of the commencement of the trial will be given hereafter. (The competition will be open to all who become members of the Society, and enter their machines for the trial.) Upwards of $400 will be awarded to the successful candidates, and Inventors are invited to be present with their machines and engage in this trial, which will be conducted in a manner to secure practical and valuable results, that will be of importance to the whole Agricultural interests of our country.

☞ Persons desirous to compete must become members of the Society by the payment of $1.00, and enter their names and their implements with the Secretary, by the 5th of July.

All desired information, as to the regulations for the trial, will be furnished on application to the Secretary. B. P. JOHNSON,
Agricultural Rooms, Albany, May 7, 1852 Secretary.

To Book Canvassers in the Several States.

A GREAT BOOK FOR AGENTS, to whom the sole right of sale is given. Magnificent work of History. A whole library in itself—cost $11,000—1,207 pages—70 Maps—700 engravings. Now ready, and for sale by subscription, a

History of All Nations,

From the earliest period to the present time; or *Universal History and Biography Combined.* In which the History of every Nation, ancient and modern, is separately given,

BY S. G. GOODRICH,

Consul to Paris, and Author of several works of History, "Peter Parley's Tales," etc.

It contains 1,207 pages, royal octavo, and is illustrated by 70 maps and 700 engravings; bound in Turkey Morocco. The work will not be offered for sale in Bookstores, but will be sold by canvassing agents in every county in the several states, to whom the exclusive right is given by the publishers. Invariable price in one vol., $6.00, in two vols., $7.00.

For full particulars of this agency apply to the subscribers. As this work is destined to have a large sale, the earliest applicants, if competent and responsible persons, will receive the most desirable territory for canvassing. Address DERBY & MILLER,
Sole Publishers, Auburn, N. Y.

P. S. Applicants in the South Western States will please address H. W. Derby & Co., General Agents, Cincinnati, Ohio.

NEW-YORK AGRICULTURAL WAREHOUSE.

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WILL stand this season at the residence of the subscriber, (known as the Shotwell Farm,) between Aurora and Lavanna, Cayuga county, N. Y.

Samson 2d was sired by my Imported Draught Horse, "Old Samson," out of my full blooded mare "Megg." "Megg" by same horse, out of my Imported mare "Margaret." This valuable young horse is the only one in the United States that has more than one-half of the original Samson blood. He is a good dark bay color, with black legs, about 16 hands high, very compact, and possesses immense muscular power; is a kind and free worker—was five years old last summer, and weighs 1,555 pounds.

Terms—$8,00 to insure a mare with foal, payable on the first of March next. Mares to be regularly returned. Accidents at the risk of owners. JOHN ROBINSON.
Lavanna, Cayuga Co., N. Y, June 1—1t.

THE CULTIVATOR

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THE CULTIVATOR.

TO IMPROVE THE SOIL AND THE MIND.

NEW SERIES. ALBANY, JULY, 1852. VOL. IX.—NO. 7.

Formidable Losses.

Every farmer who understands common arithmetic, may amuse and instruct himself with great advantage by a few interesting calculations. Successful tillage, as every one knows, consists in three important particulars,—namely, a good soil;—its fertility made accessible;—and the entire monopoly of that fertility by the crop intended. A soil may consist of the most valuable ingredients, but if these are kept immersed in a subterranean basin of water, as in many undrained soils during every wet season, they are as inaccessible to the plant, as if encased in walls of masonry. A hard, uncrumbled soil, is little better. But the greatest absurdity in farming, is to expend five or ten thousand dollars in the purchase of land, some hundreds more in fitting it for prolific crops, and then permitting one-fourth, one-third, or even one-half its costly value to be drawn out and destroyed by the growth of useless weeds!

We have known men who were exceedingly jealous of "their rights." Rather than be defrauded of a half dollar, they would rush into a law-suit costing twenty times that sum. Rather than lose "the best end of a bargain," they would resort to a great many very inconvenient and troublesome expedients. Rather than submit to furnish a neighbor's lawless hog with a single meal of undug potatoes, they would incur perpetual resentment. But strange things have not yet come to an end, for these are the very same men that submit with most admirable patience to the invasions and waste of thousands of elder bushes and burdocks, tens of thousands of mulleins and horse-thistles, and a hundred thousand Canada thistles, and a million red-root plants.

Now, the calculations we are about to propose, as above alluded to, are these: Let every land owner, whose fences are lined with a belt of elders, burdocks, and briars, ascertain by weighing, the precise amount of vegetable growth yielded by these three plants on a square yard of land;—multiplying by 30 will give the weight on a square rod. Then let him make a fair estimate of the amount of land thus occupied along all the miles of his fence, and he may soon know how many tons of elder bushes, briars, and burdocks, his costly land grows in a year. It would of course be quite as well for him to have this growth in clover, timothy, or Indian corn—but before throwing the calculation aside, let him ask himself, if he would not feel somewhat indignant should his neighbor's cattle fall upon and devour an equal number of tons from his meadow or corn field? Now, cannot he contrive to get up a like amount of indignation against the weeds? The same kind of calculation may be applied on the same farm, to the Canada thistles, horse-thistles, Johnswort, pig-weeds, mulleins, mustard, and fox-tail grass, which grow in various degrees of denseness broadcast over the fields. We cannot but think that on some farms it would present rather startling results.

It would be an interesting inquiry, to look into the actual losses sustained through the whole country by the growth of weeds. How many tons on an average are grown by each of the million farmers of the United States? Three—five—or ten? If the former only, the aggregate crop would be enough to load a continued train of farm wagons three thousand miles long—or twenty thousand canal boats—or, more than ten times all the whale ships belonging to the country,—with this useless herbage. A single weed—the Red Root,—has been estimated to have occasioned greater loss in some counties than if every dwelling house had been consumed by fire. Is not the subject one worthy of some attention?

Now, there are two ways in which all this evil comes upon us. The first is by the increase of seeds—the second, the want of prompt destruction when once the evil has commenced. The increase by seeds, under favorable circumstances, almost exceeds belief. We have counted the grains on a single moderate sized plant of chess, and found over three thousand. An equal increase the second year would produce nine millions; the third year, twenty-seven thousand millions; the fourth—but we will let some of our young arithmetical readers carry out the reckoning for ten years, and see if there is not enough seed by that time to turn the whole wheat crop of the globe to chess. A full grown, adult pig-weed, will yield eight thousand seeds,—which may increase in a few years to countless myriads, just because, as Prof. Lindley says, the cultivator was unwilling to make "a single flexure of his vertebral column," in extracting the first young weed from the soil. There are certain weeds, troublesome and costly in the highest degree in some regions of country, which are entirely unknown in others—simply because no seed have ever been deposited there. Then again there are other localities which were once plentifully infested, which have been completely eradicated, and not a single representative left. We could name several farmers who have succeeded in driving from both soil and seed, the last vestige of that insidious intruder, chess; and several others who by vigilance and industry had exceedingly lessened the annual weeding of red-root. Such examples are worthy of imitation; and at the present season, when weeds are about preparing to form their millions of germs for increase, we hope the subject may receive the special attention of cultivators.

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Cultivation about Fruit Trees.

We have often urged the importance of clean and mellow cultivation for young fruit trees, to promote growth; and for older ones, to furnish fruit of fine quality. Young trees, in grass ground from necessity, should be widely spaded; but even this treatment is quite imperfect, and becomes nearly useless as they advance in size and throw out roots far beyond the reach of any ordinary spaded circle. We have just measured a few trees differently treated in this particular. Small peach trees, set out six years ago, and kept cultivated broadcast most of the time, have trunks a foot in circumference, two or three feet above the surface. Those in similar soil, but kept spaded in five feet circles, in grass, are only eight inches in circumference, although ten years old. Most of this growth was made in the first five years.

Peach trees three-fourths of an inch in diameter were set out on a gravelly soil, of only very moderate fertility; but they were kept cultivated by the plow and harrow, and no crop nor vegetable growth of any kind allowed within the broad strip of ground of which they occupied the center. Two and a half years from transplanting, that is, the third summer, several bore a peck or more each, and one bore three pecks.

We have often wondered why some planters were so extremely desirous to procure very large trees for transplanting, as those of medium size make the best growth, and often outstrip the others. But we have now solved the puzzle. They set them out on hard ground, in cramped holes; and then, unlike any farm crop, whether corn, potatoes, carrots, &c., leave them entirely to themselves, to contend with weeds, grass, crusty soil, and other difficulties, unassisted. They consequently make no growth at all, or, to use the provincial phrase, "none to speak on"—and hence in three years, the large trees are still the largest, and the smaller still the smallest, both remaining at their original stature.

Seven years ago, we set out a row of apple trees on a rather unpromising gravel soil. The holes were dug seven feet in diameter, and all but the central position, where the tree was to stand, filled with soil made rich by thoroughly raking-in manure. About one-third of a cubic yard of manure, or a little less, was applied to each hole. When the tree was set, only ordinary good soil was placed in contact with the roots. Nothing unusual appeared the first year. The second, the young fibres began to reach the rich bed of earth, and the rapidity of growth was surprising. The fifth year one tree bore a bushel, although they were only the size of a common carriage whip when transplanted. We have to day, (after seven summer's growth,) measured most of them, and find their circumference at two feet high, to vary from fourteen to eighteen inches. The soil has been kept cultivated, with but little crops near them. Their growth continues nearly undiminished.

Will not those who have neglected their trees, profit by these hints at the present time.

Dry and Rat-proof Cellars.

Frequent inquiries are made on this subject. Cellars plastered at the sides and on the bottom with hydraulic cement, will keep out the water without a drain, and will exclude rats, provided the work has been done in the best manner. Imperfectly executed, the water will leach in; and if the coat is too thin or too soft, rats will excavate beneath it, and then crack it off peice-meal. It is unnecessary to inform our readers that the very best material is to be used; but some are not enough aware of the importance of giving it sufficient thickness. On dry and hard gravel, it may do well to apply the mortar at once to the excavated face of earth; but usually it is much better to cover the cellar bottom with a paving of stones; and where rather inclined to dampness, with two or three successive layers, the last of which may be quite small, or even coarse gravel will do. The mortar, made rather thin, is then spread smoothly over. In a few months the whole will assume a flinty hardness, through which no rat, with all the cunning of a politician, can ever make his way. It will be as dry as a floor, and fruit, vegetables, and other articles may be placed directly upon it without fear of dampness. It will not very soon wear out nor decay.

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Use of Yearling Bulls.

LUTHER TUCKER, ESQ.—Noticing in your May number, that a subscriber wishes information on the capacity of yearling bulls, I seize a leisure moment to lay before you my experience. About five years ago, I owned a full blooded Ayrshire yearling, and contrary to the opinions of our standard authors on cattle breeding, as also my own notions on the subject, I allowed him to be put to my cows, then numberng twelve; all of them proved to be with calf. The following season he was made use of with like success, and the third season he served 35 cows without a failure. He was then sold to a farmer in the eastern part of my county, who has him in his yard at this day, and a more noble specimen of a bull it would be difficult to "skare up."

Again, last year I used a yearling, (sired by the one above referred to,) for my cows, numbering twenty, and five of my neighbors; and the present spring has proven his success, with one exception, which was owing to some deficiency in the heifer, and no fault of his. He is now a thrifty looking animal, and in all probability "will keep his end up," as we farmers say, without a doubt.

In neither case have I given these animals any extra care, save stabling in winter to keep them from the cows, and a little grain per day, towards the latter part of their first winter. THOS. B. ARDEN. *Beverley, May* 20, '52.

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CATCHING FLIES.—The Prairie Farmer tells how they catch flies in England. It is done by "fly-papers," and the process is called "fly torture," on account of the manner in which the insects have their feet fastened in the "*stocks.*" The article used is rosin and sweet oil mixed, and spread over the surface of a newspaper, and then slightly sprinkled with sugar dust. The moment the fly puts down his foot he is fast. They are thus caught with great rapidity. The "torture" appears to consist in a want of liberty to go where they please.

Influence of Agricultural Pursuits on Health.

Essays have been written and published in regard to the best means for the preservation of the health of domestic animals, and of the various fruit trees and plants that the farmer cultivates, and great advantages have resulted therefrom; but articles in regard to the health of the farmer himself, and of his family, and those in his employ, seldom find place in the columns of our agricultural periodicals.

It is not to be supposed, that this want of attention to the important subject of health, of the human animal, is owing in any degree to want of interest, or want of thought on the subject, on the part of the conductors of, or contributors to the periodicals devoted to the interests of those engaged in these pursuits, but rather it is owing to the fact that *physicians* seldom write on such subjects, except for journals specially devoted to the interests of their profession.

If a farmer cannot reasonably expect either pleasure or profit from unhealthy domestic animals, much less can he expect that disease in his own person, or in members of his household, can be conducive to his or their happiness—and it may be well to ask the reader's attention for a few moments to this subject.

By far the largest number of the inhabitants of the rural districts, are, in a greater or less degree, engaged in agricultural pursuits, especially the *male* portion, and those who are not thus employed, are liable to become affected with the *same* causes that produce a *direct* effect upon the health or the constitutions of those who are farmers by occupation. Especially is this true of the *females* of the farmer's own family.

Farm laborers are greatly exposed to the vicissitudes of the weather—more so, probably, than any other class of people who reside in the country, except physicians. They are under the necessity of taking care of their cattle, their fences, and their crops, without regard to the state of the weather, and are therefore peculiarly liable to suffer from colds, coughs, rheumatism, fever, &c. They are likewise liable to exhaust their system by over exertion, either from too severe labor for a few hours, or from that which is too long continued, as in the long days and severe exertion of the haying and harvesting seasons, when many become almost completely exhausted.

In the matter of *food*, every intelligent farmer knows that on it the animal depends for all his vital powers, and is therefore careful to supply the horse or the ox that works, food suitable in quality and quantity to meet the demands of the system, but in regard to *himself* and "the rest of mankind," he betrays a degree of thoughtlessness that is truly wonderful. The food of agriculturists, generally, is composed of too great a proportion of fat, and salted meats, and that too very improperly cooked.

It is supposed that little culinary skill is required to cook a piece of salt beef or pork, or to boil vegetables, or bake beans, and as the severe labor of the farmer produces a vigorous appetite, he is apt to content himself with a small variety of food, and that very improperly prepared.

It has been said that "bread is the staff of life," but if what often goes by that name, and is a compound of sour milk, or putrifying yeast and saleratus mixed with *second* quality flour, and imperfectly baked, is the staff referred to, it would be better to walk to the grave without the aid of this staff. But few people ever enjoyed the luxury of *good* bread, and until they know what that is, they will continue to partake of too large a portion of animal food. As little attention is usually paid to supplying the table of the farmer with a proper amount of fruits and vegetables, as to the farinaceous articles of diet—and either because he is in haste to resume his labor, or because there is no pleasure in retaining *such* food in his mouth, the farmer is accustomed to force it into his stomach without the requisite preparation, and almost with the speed with which an ostrich would bolt a red hot stone.

In regard to the location of their dwellings and outbuildings, the majority of farmers display as little correct knowledge and taste, as in the culinary department. If it be more convenient to have the pig-pen, or the farm-yard immediately adjoining the parlor or the cook-room, so that all may enjoy the perfume that arises therefrom—or to allow all the wash and the slops of the kitchen to accumulate and ferment near the windows of the sleeping rooms, there, while surrounded with a rank growth of poisonous and decaying vegetables, to distil the very essence of disease and death; this, and the aroma from the compost heap, is allowed to assail the nostrils of all, until the schneiderian membrane is as little annoyed by the stench, as are the palatal nerves of the tobacco chewer by his regiment of "old soldiers."

With all these peculiar sources of disease, and many others of scarcely less magnitude, that press with greater force upon the vital powers of the farmer, than upon those who are engaged in other pursuits, it would but be natural to suppose those who are engaged in agriculture, must be more liable to sickness and death than other members of the same community; but the very opposite fact is now well established.

During the twenty months preceding the first of January 1850, there were reported, in the state of Massachusetts, the death of 4,974 *farmers*, and these died at the average age of 63.83 years. Of those styled *laborers*, 2,283 were reported to have died in that state during the same period of time. These were, in good part, men who were engaged on farms, as house servants, and in any chance employ where they could earn a day's wages, and doubtless they had less healthy habitations and food than those for whom they labored. They attained to the average age of 45.39 years, or nearly 18½ years less than the average for farmers.

In the report for the year 1850, we find recorded the deaths of 886 agriculturists, who had attained to the average age of 65.13 years, or about 1⅓ more than those reported the previous year. In this report are also recorded the deaths of 707 *laborers*, at an average age of 44.14 years, or over a year *less* than that attained by the same class, as recorded in the previous report. As each class were equally exposed to all the *general* causes of disease, these reports prove that the *comparative* relative conditions of these two classes of people, had undergone quite a change in the short time of two and a half years.

As a contrast between the salubrity of different occupations, or the influence occupation has upon the life of those engaged therein, it may be well to present other results gathered from the above named reports. During the latter period—or for the year 1850, there were reported the deaths of 263 *shoemakers*, whose lives had averaged only 44.37 years; and 26 *tailors*, who averaged only 41.33 years, showing that those who follow these occupations, although they labor under shelter, unexposed to the inclemencies of the weather, are nevertheless obnoxious to *other* causes which tend to reduce their lives to over 20 *years less* than that attained, on the average, by agriculturists.

These comparisons might be extended to *all* classes of occupations, and without *any* exception, they would be found to produce results favorable to the longevity of those engaged in agriculture.

To present the above in a different form, it may be proper to consider that individuals do not usually enter upon the active duties of any occupation, so as to be entitled to be *classed* with those who follow that for a livelihood, before they arrive at 18 years of age, and we find that the farmers work *as farmers* after this period, 47 years, while shoemakers and tailors, do not on an average, survive beyond the time of commencing their their occupations, but about 25 years.

At the commencement of this paper, it was stated that there are many powerful influences in operation, that tend to *abridge* the lives of those engaged in agricultural pursuits; yet an examination of the tables of mortality shows this class of people to be comparatively *long-lived*, and it is but proper to learn, if possible, *what causes* there are which counterbalance those enumerated as prejudicial to the health and life of farmers, and which insure them, on an average, a life for labor and for enjoyment, of nearly double the number of years that are reasonably to be expected by those of the sedentary habits of the tailor or the shoemaker.

Among the most prominent causes of the great comparative longevity of agriculturists, no doubt we should find the fact that their labor is performed where they can breathe the atmosphere in its purity, while they are enjoying the vivifying influence of the direct rays of the sun. With a pure atmosphere for the lungs, during labor, where the inspirations are deepest and most frequent, and with the blessed sunshine to warm the whole frame work, and all the fluids of the system, a man becomes prepared to resist the ordinary injurious impressions that otherwise would produce a very deleterious effect upon him.

The farmer's exercise is of that kind which gives play to *all* his *muscles*, and not to one set alone, as is the case in many other occupations—therefore he is less liable to accumulations of effete matter lodged in some part of the system, that only need a small amount of foreign poison to produce a ferment and consequent fever.

The farmer's mind is free from the anxiety, and the turmoil and trouble attendant upon trade. He is not obliged, like many mechanics, to dispose of the product of his labor as soon as produced, to procure bread for himself and family, for his food is mainly produced upon his own land, and not subject to the changes of the money market; neither is he subject to those pangs of *conscience* which must at times harass those whose " business it is to cheat each other for a living." Consequently his appetite and digestion are good, and his sleep undisturbed and refreshing.

There is yet another cause, of no small potency, in producing the farmer's great exemption from disease and death. It is the fact, that almost all who follow agricultural pursuits for a livelihood, are the offspring of parents of the same class, and their parents had been too busily occupied during their childhood to spend time in dosing them with *tincture of rhubarb*, *paragoric*, *Godfrey's cordial*, *hot drops*, *soothing syrup*, *&c. &c.*, after they had crammed their stomachs with cake and confectionary, or half decayed fruit, which forms so large a part of the aliment and *ailment* of the children of the cities. Being exempt from these pestiferous influences, their systems have become more perfectly developed, and consequently they are able to endure, without material injury, fatigue and exposure, that would destroy persons of less hardy constitutions; and if they will but avoid the sources of injury mentioned in the commencement of this article, they will insure to themselves a still longer life of health and happiness. C. H. Cleaveland, M. D. *Waterbury, Vt.*

Vermont Horses.

Eds. Cultivator—The horses of Vermont have for many years, stood high in market, and deservedly so, I think. There has, in days past, been some good *blood* in the state, sufficient for a foundation to build upon. But care enough has not been taken among horse breeders, to preserve the blood of their stock animals in such a degree of purity as to warrant any confidence in the character of their progeny. Yet some good and valuable animals have been and still are produced, partly from *lucky* crossing, and partly from the usual manner of treating stallions throughout the state. As a general thing, stallions in Vermont, are working horses during the winter. They are not kept high except during the season for covering. Their colts, therefore, show an amount of muscle, and a docility of temper, actually surprising in some instances. Mares usually are worked enough, often too much, to give their muscular system its due and requisite tone. But in many parts of the country, stallions are suffered to stand in the stable, week after week, and month after month, after their season is over, without any exercise at all, or at best with but very little.

Without particularizing too much, or going into an analysis of the various *points* and proportions of the horse, I will say, in general terms, that the muscular and vital system are those to which the greatest attention should be paid. The muscles of a horse are what we use, and they are dependant on the vital organs for their growth and power of endurance. The art of reproducing, is a *vital* process. But so closely are the muscular and vital systems connected, so mutually dependant are they, that one cannot, for any length of time, be stimulated or exercised to excess, without injury to the other. Want of exercise is felt first in the muscles

—they diminish in size and firmness, and if much or high food is allowed, fat is started instead of muscle—or the vital organs are unable to resist the accumulation of poorly digested food, and weakness, prostration and disease ensue. During the season of covering, the vital system, on which is then the greatest drain, should be stimulated, and the exercise of the stallion should be much reduced. A stallion kept at hard work, and at the same time allowed to cover, is not sure, and what few colts he may get are weak and feeble, showing great deficiency in the size and power of their vital organs, and as a matter of course deficient in muscular energy.

The reason why so many good horses are generally sent to market from Vermont, is found in the fact that stallions are treated as common farm horses, except during the season for mares. Their muscular system is fully developed by work, not mere *exercise*, but hard work, during the fall and winter, and the spring finds them robust, hearty, and full of muscular power and vital energy.

In " Mason's Farrier and Stud Book," edited by Skinner, is a short essay " on the condition of a stallion"—worth, *practically*, more than all the rest of the work. It concludes in these words—" Trainers find their endeavors to produce the highest state of strength in an animal, greatly impeded by any excitement of the sexual appetite. It is then the more necessary to keep the horse in a state of training throughout the year, impressing most forcibly, a tone of health and strength upon his system, at a time when his nerves are liable to the least distraction—never allowing such excess of service, or of the excitement of sexual appetite, as to induce a disturbance of spirit or temper, or a relapse from the most thoroughly strong, healthy, and regular tone of the system."

Such has been the course generally pursued with " Morgan" stallions; their docility and tractableness, caused by constant use, rendering them fit for ordinary labor, and more pleasant in the harness than most stallions. The *blood* of the Morgans at this time, amounts to but little; strictly speaking, they are not entitled to a distinct family name. For from Mexico to Maine, I can show you " Morgans" in form, size, color, and action, whose progenitors never saw Vermont; and if you will pay a visit with me, some day, to Queen Victoria's stables, I will show you there a stallion, *thorough-bred*, yet a " Morgan, every inch of him."

Some persons are inclined to believe that everything of the horse kind in Vermont, of any value, is " Morgan." It is true that the Morgan name has great weight in some quarters, and is, I am ready to admit, entitled to a certain quantum of respect. But the old Morgan is not the only stone in the foundation. Within the past forty or fifty years, there have stood in Vermont, among other stock horses, a colt of imported " Magnum Bonum," a get of " Cock of the Rock," a get of " Hamiltonian," one of " Post Boy's" colts, one got by " American Eclipse," " Long's Henry," now living, and owned in the state, and several descendants of " Messenger," and other thorough-bred horses.

These all have been, more or less, subjected to the same treatment, and have left stock worthy of their illustrious names.

It is from a promiscuous mingling of such strains of blood, amid the pure waters, the sweet pastures, and the salubrious atmosphere of Vermont, that she has been enabled to furnish so many good, (not to say " Morgan,") horses. J. *Stowe, Vt., May* 10, 1852.

Utility and Importance of Agricultural Surveys.

By the way of furnishing a useful variety of practical information to the patrons of the Cultivator, I propose occasionally, to prepare a few brief sketckes of portions of the country through which I have visited within the past four years, which will tend more fully to bring into notice the natural and artificial resources of those sections I may from time to time describe. The agricultural press has already done much in effecting this object, but a wide field is yet open for those who feel inclined to contribute useful facts for their fellow farmers, as a means of guiding them correctly in ther onward course of improvement. As I have taken a permanent stand at a point convenient to this city, as a matter of course, most of my descriptions will be confined to Southern and Eastern Iowa, Western Illinois, and Northern Missouri, as my recent, and probably future journeyings, have been, and will be, through those portions of country; but to show that I have not fully forgotten Ohio, I will confine my observations for a few moments, to a brief description of the Sciota Valley.

THE SCIOTA VALLEY presents some important agricultural features and developments, that are worthy of being understood by every votary of the plow; and I shall endeavor to give a bird's-eye view of some of the prominent features of this interesting region, of what may in fairness be styled the first agricultural state in the Union. The ancient metropolis, Chilicothe, may be considered about in the center of the valley, taking into view the wide intervales that stretch along the river from its mouth, at Portsmouth, where it enters the Ohio, to the small branches at its source. The country lying between the Sciota and the Little Miami, some 40 miles in width, and nearly 150 in length, was originally a military tract, given to the patriots of Virginia, who aided in the achievement of the American Independence.

This extensive tract of fertile lands, being parcelled out in large bodies, has given rise to a system of agriculture somewhat peculiar to itself, and which strikingly contrasts with that of any other portion of the state. The descendants of " the first families in Virginia," upon their initiatory movements in pioneering a region of country distinguished for the number, power and industry, of the aboriginal tribes, found much to contend with; and after driving the red man of the forest from his almost boundless plantations of maize, established a system of agricultural operations that highly comport with the vastness and grandeur of their domain. The intelligence and magnanimity of the Sciota farmers, are among the most striking features that distinguish them from those who occupy some other portions of the west; and farming, instead of being done in the snug, quiet way that is characteristic of the Yankee farmer, in the north-eastern range of counties, is prosecuted upon a large scale, which can only be comprehended by giving a specific, detailed description. In no portion of this continent can an equal number of independent gentlemen farmers be found, in proportion to the area, as are interspersed throughout the Sciota Valley, and the intelligence and enterprise that pervade the masses of land owners, will secure the soil from deteriorating, as unfortunately has been the case in the best portions of Virginia.

The great staples of the Valley are corn, pork, and beef. The corn is mainly grown with a view of feeding it to beef cattle, and hogs, on the ground; and the soil, instead of deteriorating in fertility, improves in productive powers, so that land that has grown 40 consecutive crops, will now produce from 80 to 100 bushels per acre, with the labor that would be required to produce 25 bushels per acre in northern New-York. The corn-fields are large, ranging from 100 to 500 acres each; and as far as the eye can stretch in the distance, one continuous line of corn fields are presented to view, which contributes a richness to the landscape, and a permanent source of wealth to the land owners, that are rarely met with. The only labor given the crop is a plowing, followed by planting, and two, and at the most three plowings, with a one horse shovel plow. One man, with the aid of a horse, will properly tend 40 acres of corn, where the land is not overrun with weeds; and the crop on the ground, when converted into beef and pork, is worth from 20 to 30 cents per bushel; and as it costs only some 10 cents per bushel to produce it, and the land is improved for future croppings, at the rate of some three dollars per acre, the business of corn growing, and fattening beef and pork, are among the safest and most profitable landed operations.

Farming in the Sciota country is practiced largely upon the scale that prevails in the south, in growing tobacco, cotton, and sugar cane. One man, for instance, will feed 500 hogs, on corn grown by himself, and during the season for purchasing store hogs, his agent will buy in two or three times the quantity he can feed for market from his own crop—and to make up this deficiency, he buys of his neigbors their entire crop. Thus the large farmer, and those of small capital, each perform different departments—the one with his ample means, buys the store hogs, young cattle, and horses, and even the crops of corn on the ground, for which he pays a fair price to the latter, and both parties seemingly make good profits, and are satisfied with the gains afforded by their business. The grower of corn is contented if he can get from 12 to 15 dollars per acre for his corn, and the feeder takes pretty good care to purchase his stock so that they net him in the New York and Philadelphia markets, a handsome profit. Besides what is fed for home consumption, there are annually sent from this Valley between 30 and 40,000 head of five and six year old fat bullocks, worth from 50 to 70 dollars each. The cattle, are mainly grade Durhams, and possess fattening properties which in a peculiar degree adapt them to the climate of the country, and the requirements of the stock feeders. It is a striking fact, that the corn, after being eaten by the cattle, contains fattening properties which impart to it highly valuable qualities for the production of pork, and hence, that no portion of the crop should be lost, the experienced feeder parcels out a full grown store hog to each bullock; and frequently, fields containing 500 fat bullocks, and an equal number of hogs, along the Valley and tributaries, are seen, which to an admirer of good and profitable husbandry, is among the richest sights that can be imagined. This is especially so, from the fact that the stock, both cattle and hogs, almost uniformly strongly portray evidences of good breeding, and thorough skill in rearing and feeding. The largest operator in feeding swine, with which we have any knowledge, received from a pork packing establishment last fall, *fourteen thousand dollars*, for his annual crop of hogs; and the largest feeders of cattle, drive over the mountains annually, some 800 head of fat bullocks!

On the Valley, towards its mouth, the system seems changed, and instead of hogs and cattle, corn cribs of ponderous proportions, are everywhere presented to view, and the corn being shipped to Cincinnati and other markets, commands, probably, on the whole, better prices than if fed on the ground.

The cultivation of broom corn is more extensively prosecuted on this Vally, than in any other portion of the world. From 100 to 800 acres, are grown by individual farmers, and the operation is decidedly a paying one, affording, as it does, a profit of from 15 to 30 dollars per acre, over and above rent of land, and the entire labor of managing the crop. The seed is sown pretty thickly, in drills four feet apart, during the month of May, and the crop requires about the same attention necessary for Indian corn. The seed is not a source of much profit, as at the best, stock of no kind relish it, and hence the only portion of the crop suited for market, or from which any profit can be derived, is the tops for brooms, which is thoroughly cleaned and prepared for market, and put up in bales, and shipped to New-York and Boston, where it is manufactured into brooms.

This notice of the far-famed Sciota might have been profitably extended, but sufficient has been penned to afford the reader some idea of the magnificence of its farming operations. W. G. Edmundson. *Keokuk, Iowa*

Habits of Bees.

Luther Tucker—I have noticed the theory, from Huber down to Miner, concerning the queen bee, that when they came together they were likely to be both killed. This does not agree with my observations. I several times have had both queens lost, and the bees, the first year, do nearly as well as though they had one, but die the next winter, or run out the next summer, and not one brood cell is to be found. I rather doubt whether the old queen always leads the first swarm, for I have had the queen unable to fly the first time of coming out; on her being put back, they came out regularly the second day after. Also the cause of swarming—my bees swarm as well, or as many times, with the hive about one-third, one-half, or two-thirds full, as when full. I consider it immaterial, if they have sufficient brood comb in the hive, whether it is full or not—although I think that swarms differ in the same situation—one hive will swarm when another would not. I don't know but you will think me rather credulous, but I have been reading different authors and making observations, and am led to think that bees work differently in different places, because my observations do not agree with others in several respects. Henry Hitchcock. *Martinsburgh, May 12, 1852.*

On Raising Horses—No. 3.

My last contained some hints concerning the selection of mares. I now propose to give your readers a few ideas concerning the proper selection of stallions.

This will depend upon the kind of horses we intend to breed. Unquestionably the most profitable, are such as will command high prices in our city markets, as carriage or road horses. Indeed, the remark of a very popular English author, a gentleman of education, and the widest experience, is to this point, more pertinent than anything I can write. He says—"The more we can get the attributes of the race horse, combined with the strength we want, the better horse we shall get for any purpose." We say, then, get the strongest, most symmetrical, useful looking thorough-bred stallion, that can be found—for from such have descended all the families that are now famous in our country, viz: the Messengers, Eclipses, Highlanders, Morgans, Magnum Bonums, Bluchers, Bussoras, Consuls, &c., &c.

It is quite time that we turned what mares we have left, that are descended from these famous sires, back to the fountain-head. Unless we do, we shall have occasion to complain of more lamentable degeneration than we have hitherto known. But we must hear our author, "Cecil," on these topics; not as to the propriety of using thorough-bred stallions—for this he takes for granted—not recognizing any other, except for the breeding of draught horses. He says—"Whether for racing, or for other purposes, a stallion should possess a faultless pedigree, and his good looks should bear the stamp of "title" in his ancestors and in himself; power and action are qualifications that should never be overlooked."

And again, in another connection, he remarks upon the proper selection of a stallion, where the breeding of hunters is the object aimed at. The hunter is a horse not known among us as such, but our first rate market horses are very similar to him in form and appearance.

"In breeding hunters and carriage horses, the selection of stallions may be less important than for the turf; at all events, different qualities are required. Symmetry is of far greater consequence than blood—good sound legs and feet, than speed—lofty action more to be coveted than length of stride; color and temper also come under the category of desiderata. When the fashion prevailed of running half-bred horses, it was discovered that those were most superior that had the stain on the mare's side—in other words, that the sire should be thorough-bred—the same principle holds good with hunters and carriage horses."

And I may add that it is my opinion, founded on reflection and observation, that the same will also hold for roadsters and trotters. I have no doubt that the future improvement of the trotting horses of our country, both as it respects speed, bottom, and elegance of appearance, is to come from a judicious cross with thorough-bred stallions.

Note what a wonder was produced by breeding the trotting mare Fanny Pullen, to the imported thorough-bred horse Trustee—viz. the trotting horse of the same name, that performed the greatest feat ever known. As to the adaptation of a stallion to the mare we intend to breed from, our author remarks:

"Many breeders are of opinion that the principle to be adopted, in order to obtain a first rate colt, is that of sending a mare characterised by stoutness, to a horse famed for speed: whether it can be laid down as an established rule, is, perhaps, questionable; but it certainly is desirable to breed from mares enjoying stout and healthy constitutions. If the relative symmetry of the sire and dam were more generally observed, it would, no doubt, be attended with success. It has already been suggested, that the most judicious course to pursue is that of seeking a remedy in the stallion, for the defects that exist in the female. It is again necessary to refer to that subject, as one which must be qualified in its extent, for all extremes are bad. I am not aware of a single example of a very lengthy mare producing a good foal by a very short, compact horse. The defects which may be obviated in one sex, by the converse in the other, are legs and feet, shoulders, backs, loins and hocks, but a great disparity of proportion cannot reasonably be expected as conducive to symmetry in the progeny.

The importance of this subject must excuse my quoting still further, from another page.

"The choice of a stallion for each mare, instead of being left to chance, requires to be guided by the greatest experience, judgment, and study. With the hope of correcting in the progeny whatever defects or imperfections prevail in the mare, the most judicious course to pursue, is obviously that of seeking the remedy in a stallion most perfect in those points in which the female is defective. There is, however, one circumstance connected with this practice, which demands especial notice in these pages. It is that of endeavoring to compensate, by the great size of the horse, the deficiency in that respect, in the mare; one of the greatest fallacies, both in theory and practice, that can possibly be entertained. When dealing with the handi-work of nature, man must be content to obtain the objects of his wishes or improvements, by degrees; a limit is opposed to the progress of human ambition, and the man who, in the hope of ascending to the summit on which his ambitious dream of perfection hovers, by one gigantic step, most frequently finds himself hurled to an immeasurable distance from the attainment of his wishes; whereas, had he been contented to woo nature more diffidently, he might in due time have attained his object.

It is generally expected, and usually realised, that the offspring partakes some of the features of the sire, and some of the dam; therefore, if a very large horse be put to a small mare, in the expectation of their producing a large foal, and that foal takes after its sire in the fore-quarters, and its dam in the hinder ones, the exactness of anatomical proportions and symmetry will be lost, and the offspring will be comparatively worthless."

I will detain you with but one other extract, which appears to me to be worthy of notice and reflection.

"An old and valued friend, a few years since "gathered to his fathers," who was an extensive breeder, and moreover a very keen observer, was wont to be very earnest in his declaration, that mares should never be sent but to the same stallion, during the whole course of their career in the stud, unless it could not possibly be avoided. I certainly am not prepared with any argument to oppose his opinion, although it was undoubtedly founded on very subtle notions of the works of nature. He maintained that a mare having bred foals by different stallions, entertained a greater predilection for one partner than another, and that on subsequent occasions, having reminiscences of past events, the produce was affected thereby."

I will now conclude this article by reiterating the principle laid down in the beginning, viz: that none but thorough-bred stallions should be used, unless we mean to breed mere draught horses. And if these, none should be used, except such as have good size, plenty of bone, fine symmetry; compact, hardy looking horses, with as much motion and style as possible. I am aware these are scarce. I know of none in the central part of the state that will answer the description, excepting Consternation, Pryor, and Horn-blower. The latter has been recently purchased by John Muir, Senr., & Co., of East Hamilton, Madison Co., and is truly a fine horse. Those who are accessible to him, will one day regret it, if they do not avail themselves of his services. I have seen many of his colts that promise to be first class market horses, having a look of speed, and plenty of size and style. I wish our state was filled with such horses. Respectfully, B. *Syracuse, May* 12, 1852.

Foundation of the French Merinos.

[*Translated from the French for the Cultivator.*]

My father was born a farmer, and busied himself in his youth in breeding sheep.

In 1786 the Queen of Spain made a present to the King of France, of a flock of Merino ewes and rams, selected from the best blood in that country. This flock were equally divided, and one half were placed at Rambouillet, where they have always remained; the other half were presented by the King to a proprietor, M. de Chauorier, who placed them on his farm at Croissy, four leagues from Paris. My father was 27 years of age at this date; he visited the flock soon after its arrival, and each succeeding year, to satisfy himself in regard to the acclimation of the flock, and to compare the produce of wool and flesh with the native breeds. After satisfying himself that our climate agreed with this fine wooled race, and that they offered a greater inducement and advantage from the extra product of wool, as well as their flesh, compared with the then existing flocks of France, he purchased a buck and eight ewes at Croissy, in 1800, at the first sale. The ram was four years old, weighed 124 pounds,* and carried twelve pounds of wool; the ewes averaged nine pounds in its pure, unwashed state. He bought yearly from two to four sheep, until 1810. In 1811, 50 ewes and five ram lambs. In 1818 the whole flock at Croissy were sold, 55 of the ewes to my father, who paid on average from 120 to 300 francs. At Croissy the pasturage and hay was of a better quality, and more suitable for sheep than at Rambouillet. The sheep were superior, and for this reason, my father made all of his purchases at Croissy.

In 1821, he bought one ram at Rambouillet. Notwithstanding these two flocks were of the same family, he obtained a great advantage in alliance of blood, as there had been a complete separation for 35 years; up to 1827 he bought five rams from this branch; at this date, ceded to me his flock, which numbered 209 ewes of three years and upwards, and 176 ewes one and two years old, and 90 yearling rams. In 1832 I bought 55 ewes at the public sale at Rambouillet, and since then have bought a few ewes and two rams to mix the blood with my flock, always choosing my reproductors among those which carried the greatest quantity of wool of the best quality. By this means I have increased the fleece upon my whole flock. The ewes, many of them, yielding 18 pounds,† and the rams 24 pounds. Our common practice has been to use no ram till well matured, say two years old, and not allow the ewes to drop any lambs till three years old. We have thus improved the form and size of our flock, which inherit a stronger constitution.

No American gentleman visited us previous to the 11th May, 1846. We then had the pleasure of seeing Mr. J. A. Taintor, of Conn., to whom I sold two rams and seven ewes. Since then I have yearly made shipments of a few bucks and ewes to Mr. Taintor, who has made my sheep prosper in the States as they do in France. I have also had the satisfaction of receiving a visit from Mr. Isaac de Forrest of New-York, Mr. Sanford of Orwall, and Mr. S. W. Jewett of Middlebury, Vermont. The latter purchased of me, in 1851, 82 ewes and 18 bucks. In 1852, I sold him 94 ewes, and to deliver in 1853, I have sold him 90 ewes. I have also had a visit from Mr. Howard and Mr. Parker of Ohio, to whom I was not able to sell any sheep this year or next, to their great regret.

From the various essays made by my father to ameliorate the Merino race, and those which I have continued to effect on the same principles, we arrived at this conclusion, that in order to improve the breed it was necessary to let them graze on good land, preferring dry to wet, and renew the blood of his flock every five or six years. If a longer time expires before you renew the blood, you can mantain the flock in the same quality, but you cannot improve it.

Before the ewes are fleeced, I assort and separate into as many lots as I have rams, and avoid using rams with any defect, to ewes of the same defect. It is with these means, put in good practice for many generations, that we have obtained the amelioration of our flock.

It was only in 1844 that I decided upon letting my flock compete with others for the prize. Upon this occasion, the Agricultural Assembly of Paris, appointed a commission to visit the best flocks of the country. After the commissioners made their report, the Minister of Agriculture awarded me the great medal of gold.

The agricultural exhibition for 1845 took place at Grignon. I sent there 350 ewes and four bucks. The first prize was given me and my father, then 86 years old, who received it at the hands of the Duke of Nemours, conducted there by his two sons.

The great general exhibition which took place at Versailles in 1851, I and my colleague, Monsieur Cugnot, sent there, each of us, three rams; the first prize was granted to us. Victor Gilbert. *Wideville, Commune de Crespieres Seine et Oire, April* 7, 1852.

Fancy and Common Poultry.

Messrs. Editors—You state in the last Cultivator, that you cannot at present answer inquiries concerning fancy poultry.

The subject is one in which I feel a deep a deep interest. As objects of fancy or utility, this neglected class of our domestic animals, taken in the aggregate, has a just claim to the attention of every agriculturist who is either a man of science, or a gentleman of taste.

I have had at different times, on my farm, several varieties, both of native and imported fowls; have introduced others into my neighborhood, and by reading, correspondence, and travelling, believe I am acquainted with all the best fowls in our state. My success in their cultivation has been beyond my expectations. With proper care, they multiply with wonderful rapidity. Besides the gratification of my taste, and profitable occupation of leisure moments, I sold last year, chickens enough to clear thirty dollars on each of all the hens I kept.

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* 138 pounds English.

† 20 and 27 pounds English.

I have sometimes exhibited poultry at the fairs, and never failed of taking the first premiums. I make this statement not for the gratification of personal vanity, but for the encouragement of others, and to recommend poultry culture to the poor as well as the rich, as an *amusement*, innocent and pleasing—as an *occupation* profitable to the individual, and at the same time, conducive to the public welfare. But my object in writing, was to say to your readers, who feel an interest in this subject, that they may have the advantage of my experience, if they wish it, on the following subjects. The selection of breeds native or foreign, for ornament or utility. The fixtures necessary. The manner of keeping, feeding, &c., and how to make them most profitable to the owner. I will also inform them where the kind they wish may be procured. Any assistance I may be able to render on these subjects will be entirely gratuitous, and the only personal advantage desired or expected by myself, will be the pleasure of becoming acquainted with others of feelings and pursuits congenial to my own. **JOHN T. ANDREW.**
West Cornwall, Ct., May 17, 1852.

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Letters from the Sandwich Islands—No. 2.

The stock of the Hawaiian Islands, consists of horses, cattle, sheep, goats, swine, and dogs. Horses are very numerous, but generally are a small and poor race—little care having been taken to improve them. There are at present, however, some individuals who are interesting themselves in improvement of horses, and fine animals have been imported from the coast of South America, Oregon, and New-South Wales. Except in a few instances, they are kept on fresh grass, or what they can find in ranging the country. Horses are chiefly used here for the saddle, as the roads in the country are poor, and do not admit of extensive travelling with carts or waggons. At Honolulu, however, horses are now being considerably used for the purposes of pleasure driving, and for conveying the goods of the business community. The best horses are valued at prices varying from $75 to $150. Some have been sold for more than $500.

The cattle of the Islands are a mixture of an English and a South American breed. The first introduced were by VANCOUVER; these multiplying, and being allowed to range the country unrestricted, have become wild, excepting such as have been herded, and kept for dairy purposes. The cattle now are generally owned by a few wealthy proprietors, and are the source of a large income—beef having sold in the Honolulu market during the last year, at 12½ cents per lb. In order that the property of respective owners may be known, the cattle are all branded, and also horses—with various initials and devices, a register of which is kept at the office of the Governor of each Island. Many men are employed to look after the herds—to lasso and brand them when necessary, and to drive them to market. The Hawaiians are very expert with the lasso, and are fine horsemen. Their chief fault is their abuse of both horses and cattle. Seated in a Spanish saddle, a pair of Spanish spurs on their heels, with rowels from three to five inches long, they are perfectly reckless of danger, and frequently ruin their beasts. In certain sections of the Islands, which are remote and unfrequented, the cattle are dangerous, and will attack horses and men; but as they are of more value than formerly, exertions are being made to tame them by herding. Oxen are much used for the purposes of draft; they are, however, miserably trained, and in many cases are kept constantly in the yoke. They are guided by a rope attached to their horns or nostrils. Being driven by the Islanders, whose ideas are not enlightened on the subject, the oxen are generally vicious. In attaching them to a cart, the native fears to enter between the oxen to raise the tongue, as from the treatment they receive, it is more than probable that the fear of abuse, or a desire of revenge, will cause them to use their hoofs. The cart tongue is raised by the weight of persons at the extremity of the cart, or else supported by a prop; the oxen are backed to their position, the ring adjusted, and the pin entered by a rope between the horns. There are some exceptions to their general bad training; where experienced foreigners are employed on farms, or plantations, there are some well trained pairs. In breaking steers, the natives, after having selected the mates, lasso and cast them to the ground—then drawing them together, they are yoked and permitted to rise; after being attached to a log of wood, they are allowed to run until fatigued; it is then easy to approach them; and if they are constantly obliged to draw, their training is soon completed.

Cows are as improperly managed as the oxen. If not very docile, the cow is lassoed, and tied to a post—her hind legs are bound together, and her calf is let out from an adjoining pen to share with the milker, that she may give down her milk. So impressed are the Hawaiians with the idea of a calf being necessary to cause the cow to give down her milk, that I am not aware of any who pursue a different course.

The cows are not a select milking breed, and only in a few instances, do they give more than eight or ten quarts per day. The calves are permitted to run with the cows during the day, and are separated at night. As a general thing, they are milked but once each day. A reform is, however, being made in the management of cows, as dairying is one of the most profitable branches connected with agriculture. Butter is in great demand, at 50 and 62 cents per lb. Efforts are being made to introduce a better breed of cows, and orders have been sent to Oregon for a number. A great difficulty in the way of improving stock here, is the absence of fences over the country, and the scarcity of material in many sections wherewith to construct them. The idea of wire fences is now considered by planters and farmers. In some situations the prickly pear has been successfully tried as a hedge; but it requires some years to effectually enclose and secure a field.

The swine here are of many breeds, being constantly brought by vessels from different countries. English, French, American, and Chinese breeds, are here. Except in few instances, little care is taken of them—they run at large, and seek their own food. Some that are fed attain a large size, and weigh from five to six hundred pounds; but in general they are small, and weigh from 150 to 250 pounds. The demand for pork is very considerable at Honolulu, and brings 12½ cents per lb. Lard is scarce, and sells at 30 or 40 cents per lb.

Sheep are raised in considerable numbers, chiefly for the market; they are rarely if ever sheared. Their wool is coarse, and not of much value.

Goats are found in every district—many are wild, and are game for the sportsmen; others are domesticated; but little use is made of them—the natives being the chief consumers of their flesh.

There seems to be a singular attachment among the natives for dogs—and if the poverty of a people is indicated, as some say, by the number of this species of quadruped, the Hawaiians may surely be classed as poor; for one would judge that there were four to a family throughout the kingdom. It is known that dog's flesh was a delicacy to the palates of these people in former times, and unless I am much in error—a baked dog is not an unacceptable dish yet.

The poultry here are hens, turkies, and ducks, and are a source of profit to those who are concerned in their management, eggs selling at 50 cents per dozen, hens at 50 or 62½ cents apiece, and turkeys from $1 to $2.

The birds of the islands are of few varieties, and not very numerous—they are found chiefly among the mountains. Some are of fine plumage, and formerly were more highly valued than at present, as their feathers were worn as an ornament. In the neighborhood of the sea-shore, a variety of plover exists; but as the rage for sporting is here, the birds do not increase. Sparrows and robins would be of great utility in destroying the worms which so molest the crops. It is hoped that they will be introduced soon from Oregon.

The fruits here are the banana, bread fruit, tamarind, guava, oranges, limes, citrons, grapes, figs, and other varieties introduced from South America and elsewhere. Oranges and limes do not thrive in every locality—where the trade-wind blows fresh, it seems to have a blighting influence on the growth of these fruits; in valleys which are protected and on the leeward of some of the islands they thrive well. Figs can be produced in any quantity and of the finest quality, and will yet become an article of exportation when there may be a market for them. A few peaches have been produced; but not of very fine quality. At a sufficient elevation among the mountains, it is probable that all the fruits of the temperate zone could be cultivated successfully. In time as the country becomes more settled, indigo, cotton, tobacco, and varieties of spice, may be objects of attention. The indigo plant grows wild in profusion, and were its manufacture undertaken by experienced persons, it might be a lucrative business. The tobacco plant thrives well, and it is said to be of a superior quality. The chief obstacle to its being cultivated is the expense of labor.

As already stated, the agriculturists are endeavoring to render labor cheaper by importing Coolies. Hundreds have arrived and are scattered about on different plantations. A vessel is at present engaged in bringing more. The Coolies are more ingenious than the islanders, and readily imitate all that they see performed; they are also more industrious. Being peaceable and well-disposed and occasioning little expense, they are quite an acquisition to the planters and farmers. They are engaged for a term of five years, the planters paying the expenses of their passage—some $50 each,—providing their food and paying them $3 per month. The Islanders performing less labor, demand from 50 cents to $1 per day in Oahii. At the expiration of the term of their engagement, they are at liberty to return to China or to remain.

An Agricultural Society was instituted here under the Royal Patronage in 1850, and its members are among the most influential persons of this community. The influence of this Society will doubtless be great in advancing the interests of agriculture in the kingdom. The present is the day of small things, but not to be despised.

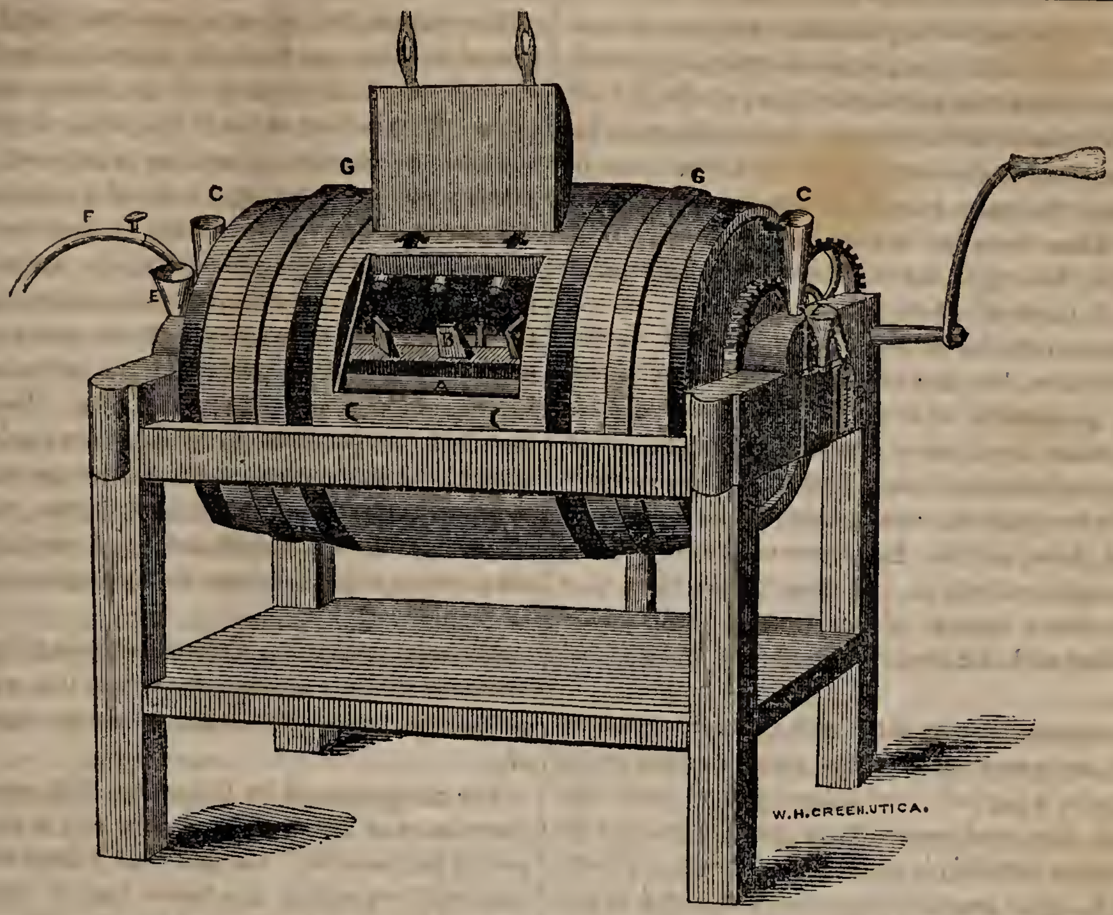
The first exhibition of agricultural productions, &c., was held last fall at Honolulu. It being a new thing to the inhabitants, but little was contributed on the part of the native community. The foreign planters and farmers were those chiefly interested. Several fine horses were exhibited by gentlemen desirous of improving the breed; a few fat cattle and sheep were seen; also large swine, and a fine specimen of fowls. Within the hall appropriated to the show of domestic productions, were displayed numerous samples of sugar from various plantations; specimens of coffee and arrow root; bags of wheat and oats of very fine quality, and stalks of sugar cane from 10 to 12 feet in height; potatoes both sweet and Irish, with kals, tomatoes, carrots, turneps and radishes. A few samples of butter were seen. The display of fruits was not large, but they were all of fine quality. Bananas, pine apples, figs, fresh and dried, and melons were the most numerous. A sample of pomegranates grown in a garden at Honolulu, and an apple and peach from trees reared with care, gave a variety to the show of fruits. But few agricultural implements were seen.

This first exhibition has unquestionably created an interest which will go far to the improvement of similar exhibitions in future. The awards as prizes were silver cups, medals, volumes of agricultural books and money. The annual address was delivered by Hon. Luther Severance, U. S. Commissioner at these islands, and was an able production, which was listened to with great interest and profit.

The agriculture of the islands seems destined prospectively to be prosecuted chiefly or altogether by the foreign population and their posterity. The Hawaiian race, like the Indians of N. America, seem to be vanishing before the influx of foreigners. Diseases and epidemics have during the last few years, swept thousands from the land, and at the present time the number of births does not equal the deaths. The race of chiefs is rapidly passing away, leaving but few descendants to take their places, and they by their excesses bid fair for short lives.

The past year has not been a favorable one for the interests of agriculture at these islands. The markets of Oregon and California on which we rely for the disposal of our productions, have been overstocked by importations from various quarters, of articles of every variety; being in sympathy with them, we have shared in the depression. We have, however, the prospect of fair remuneration and steady demand for our staples in time.

The effectual prosecution of agriculture here demands a large investment of capital—much larger than in the U. States. Land can be purchased at prices from 50 cents to $1 per acre and upward, according to locality; but the expense of erecting buildings, enclosing grounds, &c., owing to the scarcity of material, is somewhat of a drawback to individuals with moderate means Yo truly, W. C.



The Excelsior Churn.

Patented by G. B. Clarke, Leonardsville, Madison Co., N. Y.

A is the rotating or revolving body, worked by crank and gearing, as shown, or it may be attached to any motive power by passing a band directly on to its raised hoops G G. Two or more large churns can thus be driven in one frame, by passing a short band from the first cylinder to the second, and from that to a third, &c., thus affording facilities for churning any quantity of milk and cream, together or separately, at one operation. By a new and simple device, the body is easily made water tight at its lid and bearings on the fixed or permanent axles. The cross bar, or dash, is a narrow wooden bar, placed longitudinally above the center of the barrel or body, with projections B on its upper edge, extending upward to the periphery, at any desired angle. Pins inserted in two side staves of the cylinder, pass between the projections on the cross bar, which is removably attached, or supported by iron braces, to the axles on which the body rotates or revolves. The axles are hollow, with ventilating funnels C C, set in blocks, and extending downward into their cavities. By closing the outward end of the axles, a perfect ventilation of the cylinder is effected, even when filled above the place of its axis. The cavities of the axles permit the crooked water tubes E E to be passed through them, to be inserted in the corked ends of the small metallic cylinder in the center of the churn. Through these tubes which close by their flanges, the outward end of the axles, and being of less diameter than the cavities, so as not to obstruct the ventilation, a stream of cold water can be kept running; the water passing down the outward injecting funnel through the tube, filling the tempering cylinder, (the small tube on the cylinder should be corked after the air has escaped,) and passing out at the waste pipe. This need only be used when tempering is necessary, and where running water cannot be applied, a few pails from the well will reduce the temperature sufficiently. A thermometer may be used to ascertain the temperature of the water at the waste pipe, which will indicate correctly that of the milk or cream. The cross bar, tempering cylinder and tubes, can all be removed from the barrel of the churn, thus leaving nothing but the empty cylinder for cleansing. [See advertisement.]

"Thoughts on Manures."

Messrs. Editors—I propose to make a few comments upon the following extract, taken from the second article in the March number of the Cultivator, termed "Thoughts on Manures, special and general," viz: "The writer has often been amused with the theories of writers, on the subject of manures and vegetable nutrition. Many eminent men have advanced the idea, that vegetables derive most, or a large portion of their food from the atmosphere. To demonstrate the incorrectness of this idea, we have only to suppose a case. Suppose we select a sterile spot in the middle of the richest prairie of the west, and in that spot plant corn or any other vegetable. What advantage will the atmosphere, which is charged with the exhalation of fifty thousand acres of prairie land, be to that corn? Will it make it grow or produce? The truth is, the atmosphere has the same influence on vegetable, that it has on animal nutrition—no more, no less. The nutrition is taken from the soil, conveyed through the ascending sap vessels to the leaves, in the surfaces of which it is exposed to the action of the carbonic acid and nitrogen in the atmosphere, which prepares it for the appropriation of the plant to the formation of wood, fruit," &c.

I refer to this matter, from the circumstance that the position here taken, conflicts in a measure with my own views, and if correct, will destroy the conviction I have long entertained, that one of the most judicious and reliable modes of increasing and perpetuating the fertility of lands that are remote from market and others, is by cultivating clover, luzerne, &c., and allowing them to fall upon the ground, and the plowing under of green crops.

Now, if as assumed by the writer of the above extract, vegetation receives little or no nutriment from the atmosphere, but obtains it all, or nearly all, from the soil, no increase of fertility would result from the plowing under of green crops, or the growth of clover, &c., because the plants would return to the soil the exact quantity of ingredients they derived from it, and *no more.* Hence, the theory of the writer is in direct conflict with multiplied experiments, and with what I had supposed was a settled principle in agriculture. For it is too well known to need repetition, that the seeding of land with clover, or any grass, and allowing it to remain a few years in pasture, greatly invigorates the land and augments its productive powers; and the turning under of green crops is attended with the same results

Now these facts, (for they must be regarded as such) are accounted for on the supposition that plants draw their nourishment both from the soil on which they stand, and the atmosphere that surrounds them; so that in their decay, they increase the fertility of the soil, by carrying back, not only those elements that were drawn from it, but also those that were extracted from the surrounding medium. These facts can be explained in no other way, except by the theory of shade, which is too visionary a conjecture to merit even a notice.

There are multitudes of proof in nature, that vegetation not only *can*, but *does* obtain food from the atmosphere, the proportion of course, varying with circumstances, in some instances all. Of the latter, the most common example is the lichen that clings to, and survives on the barren rock; but to this may be added certain mosses, ferns, and the Epiphytes of the tropical regions, that exist entirely on the atmosphere, while it is well known that a branch of live-forever, (Sedum telephium) if fastened to a dry, hard wall, will grow an entire season.

These examples, in connection with others unnecessary to mention, are *proof positive* that plants *do* draw on the atmosphere for a support; but independent of these, the simple fact, that continuous, uncropped vegetation always generates fertility, is equally conclusive evidence. Indeed, it is highly probable that we are indebted to this wise provision of Deity for the very existence of verdure itself. For at the dawn of vegetation, the earth must have been destitute of vegetable matter; hence plants were driven to the necessity of looking elsewhere for their organic constituents, and had they been forbidden access to the great atmospheric ocean that surrounded them, they must have perished. It is to this law of nature that we are indebted for those extensive deposits of peat that are scattered over the earth's surface, and those mountain masses of mineral carbon that lie buried beneath it. Their existence in the absence of this law, would present a problem that would defy solution.

In fact, there is scarcely room for a reasonable doubt of its truth, for the whole economy of vegetation is corroborative of the principle that the atmosphere is the great storehouse, from whence its supplies have been and are drawn. Without admitting its correctness, it would be impossible to account for the circumstance that a forest of long standing will have enriched the soil, and at the same time accumulated in its gigantic trees an immense amount of organic matter. Taking the position of the writer of the foregoing extract, it would be one of the most impoverishing processes imaginable, and all newly cleared lands would require long nursing before they could be fully resuscitated and restored to their original fertility, prior to the exhausting operation of rearing a huge forest, that drew its entire support from the soil on which it stood.

But science has rendered the idea that observation upon the operation of nature, would seem to establish, perfectly consistent, by revealing to us the composition of the vegetables and the atmosphere. It has taught us that the four organic constituents of plants, carbon, hydrogen, oxygen, and nitrogen, that constitute from eighty-eight to ninety-nine per cent of every vegetable substance, exist in the atmosphere in an available form.

The oxygen and nitrogen constitute the greater portion of it, being mechanically intermixed in the proportion by weight, of 77 parts of the former to 23 of the latter. The carbon exists in the form of carbonic acid in small and variable quantities dependant upon local causes; while the hydrogen is found in combination with oxygen and nitrogen in the form of aqueous vapor, and slight traces of ammonia. Thus, the organic elements of plants are found in the air in inexhaustible quantities, for the carbonic acid, aqueous vapor and ammonia, are constantly being eliminated from the surface of the earth by evaporation, combustion and decay. These elements may be taken in, either by the leaves or rootlets. In the leaves by direct contact, in the rootlets by cool currents of air condensing the vapor, that carries with it in its fall, common air, carbonic acid and ammonia. Let it enter either way, of course the atmosphere is the source of supply.

I do not mean to be understood to say that all plants obtain all of their organic support in this way, but that all do some, and a few classes of simple organization, do all.

The case supposed by the writer, "to demonstrate the correctness of his idea," it strikes me, is not as conclusive as he assumes. The fact, that a huge oak, or hill of corn, will not thrive on a house top, or "sterile spot in the middle of a rich prairie," is not evidence of the correctness of his position, but simply proves that they are unable to draw directly from the atmosphere their entire support, but require access to other supplies that were originally drawn from the air.

Neither can we suppose there to be any material difference between the composition of the atmosphere in the center of a prairie of 50,000 acres, and that without its circumference; for air is of so buoyant a nature that it is thrown into currents by inconsiderable causes, that tend to produce an equalization.

I consider also that there is a wide difference in the influence of the atmosphere on animal and vegetable life. The former subsists on the latter, while the latter draws most of its nourishment either directly or indirectly from the atmosphere. We may safely assert that animal life receives none of its nutriment from the air, (unless it be a small per centage of oxygen,) for it is inhaled only by the lungs, and that is not the proper channel for food to enter. What the precise office of respiration may be, it is perhaps impossible to ascertain, but it is at least a very plausible conjecture to suppose one of its main objects is to generate animal heat.

Combustion is always attended with a rise of temperature, and the slow combustion of carbon constantly going on in the lungs, must be attended by the same In a full grown man in health, about half a pound of carbon is consumed every 24 hours, and exhaled in the form of carbonic acid, while a small quantity of oxygen is retained and enters into the circulation of the blood.

Now, in corroboration of this supposition, we have before us the fact, that men in extremely cold latitudes require a more carbonaceous diet than in warm ones. For example, the Esquimaux tribes, and those who navigate the polar seas, find that fat and oily food is not only heartily relished, but exceedingly conducive to health;

and this is in consequence of the necessity of their lungs consuming a greater quantity of carbon to generate the animal heat required to counteract the severity of the climate. Also, if an animal be confined in air that contains more than its natural per centage of oxygen, a hurried respiration and more rapid combustion of carbon ensues, which throws the animal into a feverish state—elevating its temperature too high. The nitrogen of the air is simply a diluent that regulates the quantity of oxygen. Now, if this be the effect of air upon animal life, it certainly is very unlike that upon vegetable, for the sun is the great agent whose genial rays warm into action the latent energies of the apparently lifeless plant.

True, there are occasionally instances of an elevation of temperature during the vigorous growth or flowering of certain plants, as a few species of the Arum, &c., but this is attended with the consumption of oxygen, which is by no means of general occurrence, the process of vegetation being to absorb carbonic acid, retain and appropriate the carbon to its own use, and eliminate the oxygen. J. R. P. *Chatham, N. Y.*

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Floors for Foundered Horses.

Mr. Tucker—It is, doubtless, a well known fact, to many of your readers, that a foundered horse cannot be effectually cured, unless taken in hand immediately; and that in many instances, foundered horses continue to grow stiff and lame, as they increase in years. We do not deny that inveterate cases of founder *may be cured*, but the instances are few where a horse is effectually cured, after having been foundered for a number of years.

Foundered horses, could they but speak, would say that they suffered *extremely*, from the intense pain in their legs and feet; and any one may satisfy himself of this fact, by watching their uneasiness while standing still—their incessant stepping—taking up the forefeet constantly, and feeling, as it were, with them, for an easy place to stand. This constant pain operates not unlike the tooth ache in the human family. By it the rest is broken, and the health greatly impaired.

But, if the founder cannot be cured, the condition of a foundered horse may be much ameliorated. I have a foundered horse, and many times it seemed almost impossible for her to get out of the stable. The elasticity of her legs was gone, and it was "miseryation" to see her walk. I put her on a floor of earth—but found it was too cold and wet for her health. I then laid a floor of plank directly on the ground, leaving an opening for the fore feet, about six inches wide, and eighteen long. During most of the time she would stand in this opening. As the floor was laid on a calcareous, retentive subsoil, she soon made mud in this hole. In a short time her legs began to assume their wonted elasticity, and many times no appearance of founder could be discovered.

The object in having a plank floor with a hole in it, as described, is twofold. One is, the horse may have all the benefit of a floor of earth, and yet not be in danger of being exposed too much to a wet and cold stall. Another is, it is a great relief, after standing in this mud a sufficient length of time, to stand on the floor; and when they lie down their bed is dry.

If those who are so unfortunate as to have foundered horses, will construct this kind of floor, they will soon discover a great improvement in the travelling of their horses, and also in their health and fleshy condition. Truly yours. S. Edwards Todd. *Lake-Ridge, Tompkins Co., N. Y.*

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Analyses of Bran and Oil-cake.

Eds. Cultivator—In the May number (p. 192) of the *Cultivator*, I see an inquiry for analyses of bran and oil-cake, which you said you could not furnish, save an imperfect analysis of the ash of bran, which you gave. I therefore take the liberty of sending you some more full. The analysis of the bran of "a soft French wheat," grown in 1848, by M. Millon, yielded,

Starch, dextrine and sugar,	53.00
Sugar of liquorice,	1.00
Gluten,	14.90
Fatty matter,	3.60
Woody matter,	9.70
Salts,	0.50
Water,	13.90
Aromatic principles, &c., (by loss,)	3.40
	100.00

I copy this from Beck's second report on the bread-stuffs of the United States. Patent Office Report, 1849, part second, page 55.

Prof. Norton, in his lectures on scientific agriculture, delivered at the Yale Analytical Laboratory, in 1850, quotes the following analyses of fine samples of wheat bran:

	No. 1.	No. 2.	No. 3.	No. 4.	No. 5.
Oil,	5.26	6.17	6.16	6.53	6.49
Water,	11.29	11.82	12.02	12.06	12.91
Ash,	6 90	6.09	9.09	7.08	6.07

From all the above analyses, we see that it contains the ingredients to make it valuable for feeding, which coincides with the experience of many practical farmers.

Prof. Way, of the Royal Agricultural College, England, published the following analyses of flax seed and oil-cake, in the Journal of the Royal Agricultural Society, and they were copied in the U. S. Patent Office Report, 1849, part second, page 488, where the following remarks are made:

Seven samples of American oil-cake gave the following results:

Oil,	11.41
Water,	7.60
Nitrogen,	4.74
Ash,	6.35

The mean of several analyses of the ash of flax seed, is as follows, which will perhaps represent very nearly, the composition of the ash of oil-cake:

Silica,	1.45
Phosphoric acid,	38.54
Sulphuric "	1.56
Carbonic "	0.22
Lime,	8 40
Magnesia,	13.11
Peroxyde of iron,	0.50
Potash,	34.17
Soda,	1.69
Chloride of Sodium,	0.36
	100.00

"From the above figures, the scientific farmer will see, that the manure formed by 100 lbs. of oil-cake, is more than that derived from 300 lbs. of Indian corn. 300 lbs. of corn contain but 1¼ lbs. of phosphoric acid; 100 lbs. of oil-cake contain about 2½ lbs." I am sir, your ob't serv't, W. H. Brewer. *Ithaca, N. Y., May* 11, 1852.

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Never be idle. If your hands cannot be usefully employed, attend to the cultivation of your mind.

Horticultural Items.

Stealing Fruit.—Nothing, scarcely, tends more to improve the substantial prosperity and comfort of the country, than fruit raising; and nothing, perhaps, encounters more obstacles. The disasters by severity of climate, and by neglected cultivation, having been laboriously avoided; the dangers from disease, as the blight, and the yellows,—and from insects, as the caterpillar, the borer, the grub, the leaf-slug, plant-lice, and curculio, having all been passed, and years of labor are about to be repaid by a delicious crop, to lose the whole by a troop of lawless thieves is a very common incident. A hungry palate for the enterprising cultivator, is poor pay for all this labor and skill, when the prize was just within his reach. A benevolent neighbor, resolved to give the idlers and all, a fair chance, planted as he supposed enough to feed all; to repay him, the thieves carefully selected the best for themselves, and left the unripe cullings for the owner, as might have been expected. The Prairie Farmer thinks, perhaps, this propensity comes "*by natur*," and that even "fines and imprisonment may not drive it out of the scamps." As proof he adds, "We are called on yearly to mourn the loss of some villainously hard green winter apples, poached in August." As we have plenty of patriotism in this country, could not some of it be directed into channels for the purpose of washing away this evil?

Productiveness of Strawberries.—Several of the best varieties of the Strawbery,—among which perhaps the Cincinnati Hudson and Rival Hudson rather take the lead, but which are closely followed by such sorts as Large Early Scarlet, Burr's New Pine, Boston Pine and Dundee, in suitable localities and with proper culture,—may be made to yield at the rate of from one to two hundred bushels per acre,—in rare instances, a little more. But the editor of the Granite Farmer says, "We have seen a small bed of the Large Early Scarlet, but a trifle if any over a rod wide, yield *a bushel of fruit daily* in the height of bearing." Will Dr. Crosby please make his statement a little more precise, and inform us about how long this productiveness continued? Also, how *long* the bed was—whether one rod, or twenty?

Hovey's Seedling and Early Scarlet.—It is always interesting to observe results in different localities. J. C. Brayton, an intelligent cultivator of Jefferson co., Wisconsin, says in the Prairie Farmer, "Of strawberries, the Large Early Scarlet is the best sort yet tried. Hovey's Seedling, fair, but less productive, does not exceed half the size represented by eastern cultivators, while the Early Scarlet exceeds their figures."

Summer Pruning.—We have been long convinced that freely pruning *young nursery trees* during their most rapid growth is detrimental to their vigor. The peach, possessing great power of reproducing lopped shoots, comes the nearest to an exception—the remark applies with greater force to the apple, cherry, &c., which should be pruned in winter or spring. A correspondent of the Prairie Farmer states that he pruned young apple trees, (4 to 6 feet high,) early in spring, and then kept the shoots rubbed off the lower parts of the stems, leaving only suitable heads,—on one half of the trees. The others were left with their shoots untouched from top to bottom. The result was, that those which received no summer pruning were 25 to 40 per cent larger than the others, even after they were pruned up to heads the following spring. This was on fertile soil, in Missouri, where the apple trees grew from the roots into which they were grafted from 4 to 6 feet, the first year. On poorer soil, the difference would probably be greater. This subject is well worthy the attention of nurserymen.

Hollyhocks coming on the stage.—The Dahlia is a superb flower, and is rendered more desirable by its autumnal season. But its tender roots are a great drawback. Were it a hardy perennial, it would far exceed in floral value even the Pæonia. Much attention has lately been directed to improvements in the *Hollyhock*, which is likely to rival the Dahlia, with the addition of hardiness. Semi-spherical flowers, exceedingly double, with closely imbricated petals, with all the various shades of deep and light rose, salmon, claret, deep crimson, brilliant red, pure white, &c. &c., have been produced so closely packed about the stem, that a green leaf can scarcely peep between them, and some fine varieties have grown nine feet high. A single English cultivator has an acre of his nursery devoted to them, 6,000 being in splendid bloom at one time.

Wintering Tea-Roses.—The following mode, (substantially the same except the thatching, that we copied some years since from the Prairie Farmer,) is reported by the editor of the Horticulturist as having been entirely successful the past severe winter:—One foot of tan-bark, applied to the oval bed late in autumn, nearly covered all the stems, the tallest being bent down. This tan-bark was kept *perfectly dry* by means of three bundles of rye straw, formed into circular radiating thatch, gathered to a point at the centre—forming what a farmer would call a *cap*. Keeping the tan dry is the great requisite.

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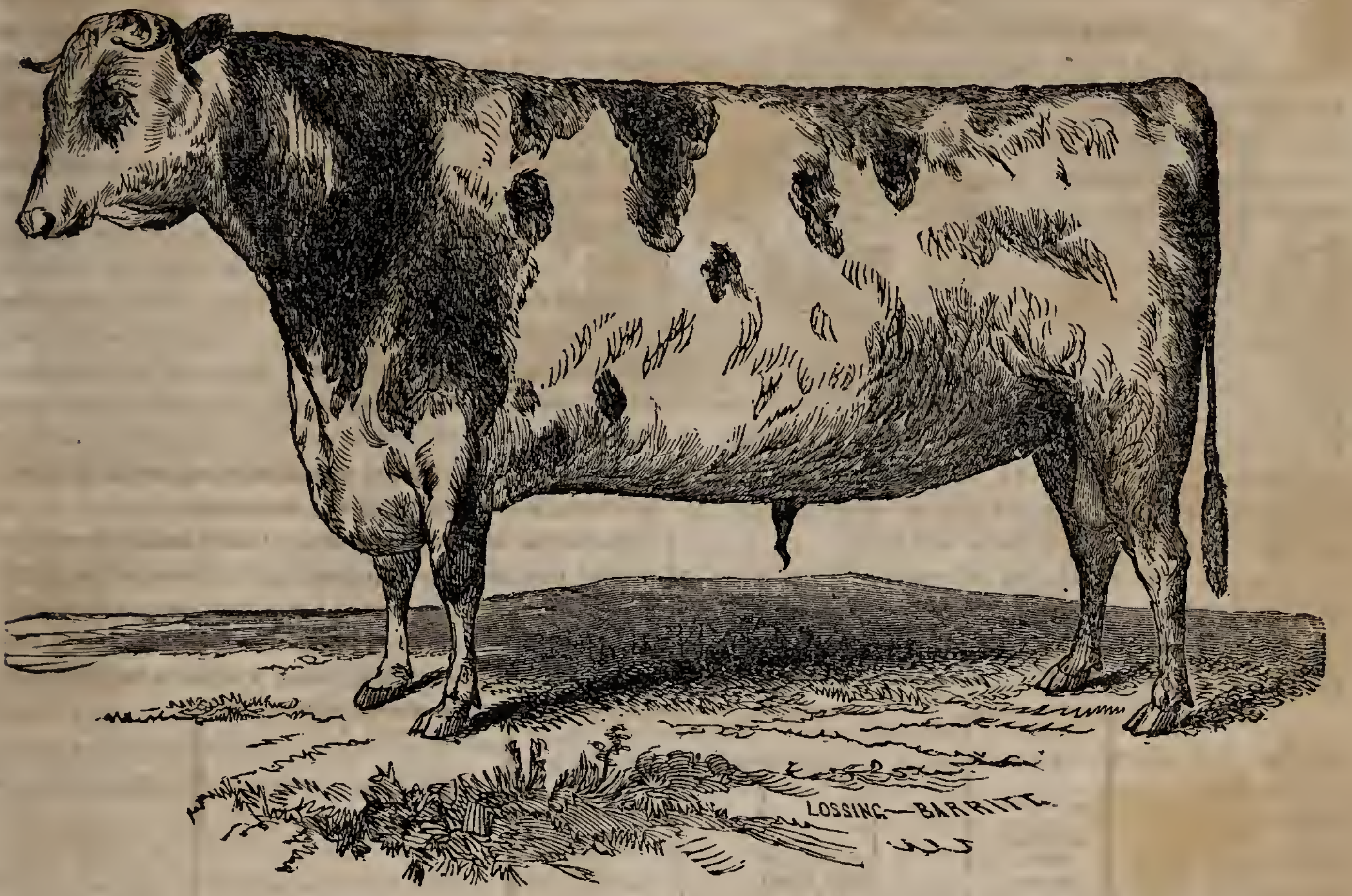
Plants Injured by Winter.

A correspondent writes, "I have never seen box edging so blighted, *but this damage is all on the sunshiny side*. A warm sunshine while it was frozen, explains the matter to me. The tree box is not injured in the slightest degree—neither is *Ribes sanguineum* in the south border, [shaded on the south by a high tight fence,]—nor Magnolia obovata, placed where the sun could not reach them in winter; yet both these shrubs are tender in the open ground. It has been said that some rose bushes which are tender when exposed to the sun-shine in winter, are hardy on the north side of a building. If so, it must be such as can bear the freezing. My experience long ago dictated, that less depended on the intensity of the frost, than on the manner in which the temperature is raised."

We have observed similar results. Box edging exposed to the sun was quite brown; while that which was protected by a board at the south, possessed all the greenness of the freshest verdure. In some localities the sun was shaded by clouds after the severest cold, and as a consequence, some plants were less injured than by less severity, followed by a clear sky. In such cases, *Ribes sanguineum*, and several other half tender plants, escaped injury; and peach buds were not killed by 12° below zero.



Short-Horn Bull "Splendor."

EDS. CULTIVATOR—I send you a cut of my Short-horn bull "Splendor," for which, with a few remarks, I desire a place in the Cultivator.

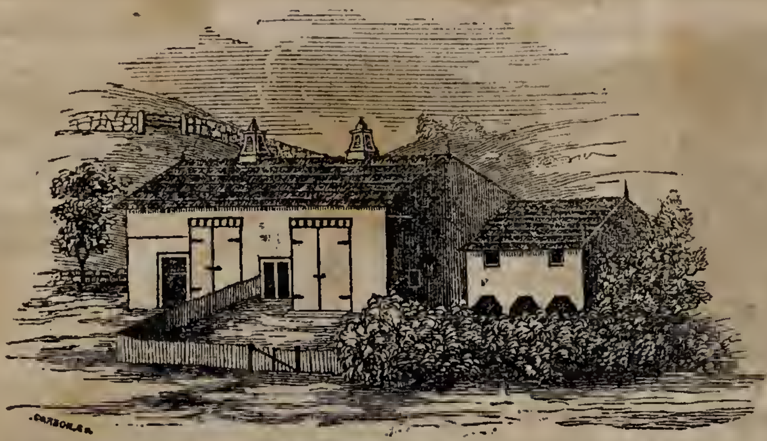
Splendor, now in his fifteenth year, was bred by Mr. THOS. WEDDLE; (dam Beauty, sire Charles, (1816,) both imported by T. W.;) he has been owned most of his life in Avon and Lima, Livingston Co., N. Y., and has been served mostly to *native* cows; the improvement shown by his get, thus bred, is very remarkable, being large, well made, and with a style peculiarly their own. Mr. ALBERTSON, a former owner of this bull, writes me as follows: "Splendor has long been considered by *good* judges, as the best sire in Western New-York, his get making more pounds of meat for food consumed, than any other stock. * * * We feed off our steers at three years old, (often at two.) * * * His heifers commonly make good milkers. I own a cow of his get, that in good feed has given 70 lbs., (35 qts.) of milk per day." * * * Mr. GANNO, of Michigan, has a grade cow got by Splendor, which has given 30 to 35 quarts of milk per day, for weeks together. She made 26 lbs. of butter in ten seccessive days. The large, mostly white fat heifer, which received the first premium at Albany, last winter, was got by Splendor. She was bred by Mr. AARON BARBER, of Avon, N. Y. JOHN R. PAGE. *Sennett, Cayuga Co., N. Y.*

A Call for Experiments.

EDS. CULTIVATOR—Equality of circumstances which might influence the result, and perfect accuracy in every particular, are absolutely necessary in order to derive benefit from experiments. And even after having done all in the most accurate manner, it would not seem to be safe to form positive conclusions from the results of one trial; for there may be circumstances unknown to us, or beyond our control, which might give a result from which we should, if we depended upon it, form wrong conclusions; or, publishing them, we might possibly mislead others. Indeed, I do believe that many an inquirer after agricultural truth, is discouraged by the apparent conflicting of the results of experiments, and it may be is led to think it makes no great difference, after all, which way a given thing is done.

I am led to these thoughts, in part, by reading the communication of F. B. of Canaan, N. Y. I may be wrong, for I never have tested the matter by careful experiments, yet had come to the conclusion that it was preferable to cut corn by the roots, both as to yield of fodder and grain. As to quantity of fodder, I will not speak, but simply state one fact which has come under my observation, relative to the quality of corn-stalks cut at the roots. Cattle will eat them at least half of the time, in preference to good hay, and surely they would not be likely to turn from hay eating, on which they might grow fat, to stalks which would hardly sustain life.

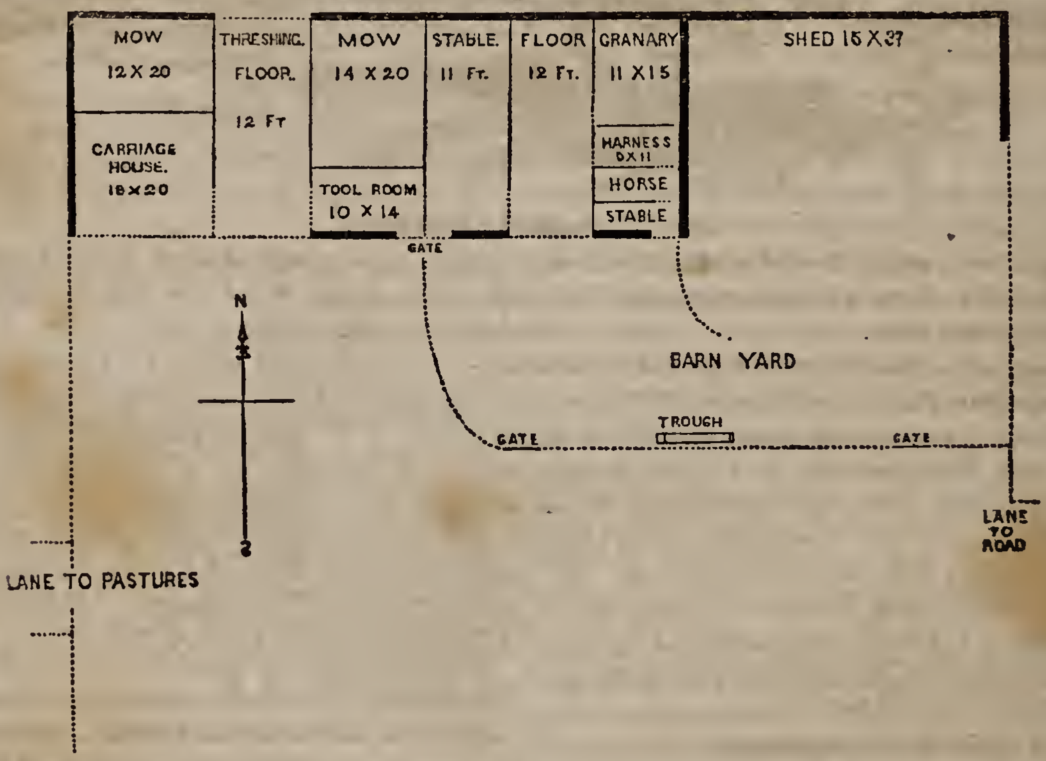
As to the yield of corn by the two methods, I have heretofore been satisfied with forming some conclusions from reasoning, and the trials of others, and guessed at the rest—a way of doing things for which I will offer no apology. Yet it is decided beyond a doubt, that several kinds of grain are better, both as to quantity and quality, when cut before the kernel is hard; and enough is known of the nature of fruits, to make conclusions drawn from their habits, out of place when applied to grain. Accurate and continued trials are needed—close examination into every circumstance which might effect the result; a particular noting of ripeness to which the grain had arrived when cut; the size of the bunches, and length of time it stands before being husked. Why may not quite a number try the experiment this year, and compare notes through the medium of the Cultivator, and continue to try and compare results, until we have proved corn to be an exception among grains, or are able to add certainty to reason and analogy. H. W. *Ira, N. Y.*



Plan of a Barn.

THE *barn* is 80 by 30; 14½ *feet* posts. The shed is 30 by 15; 16 *feet* posts, and boarded down to the wall on which the sill rests, on the north and east.

The apartments in the plan are marked in a manner to denote what they are intended for; the dotted lines represent doors. The carriage house doors are on rollers, placed underneath, and run past one another; in every instance where it was practicable, the doors run on rollers. (The rollers that suspend a door are preferable to those underneath.)



At the north end of the stable and *granary*, and on the east side of the *horse stable*, are glass windows, to admit light and air, whenever it is desirable.

The *mows* adjoining the threshing floor, are boarded up 3 feet, to prevent the grain from rolling back into the hay.

The manger in the stable is 2½ feet wide; in front of it are perpendicular rounds, between which the cattle have to pull their hay. The feeding troughs are constructed of doors hung on hinges in the floor, and supported by chains at the top. The size of the troughs can be varied at pleasure, by letting out or hooking up the chains.

Under the east end of the barn is a cellar 30 by 34 feet; by reference to the plan it will be seen that it extends far enough to take the droppings from the stable.

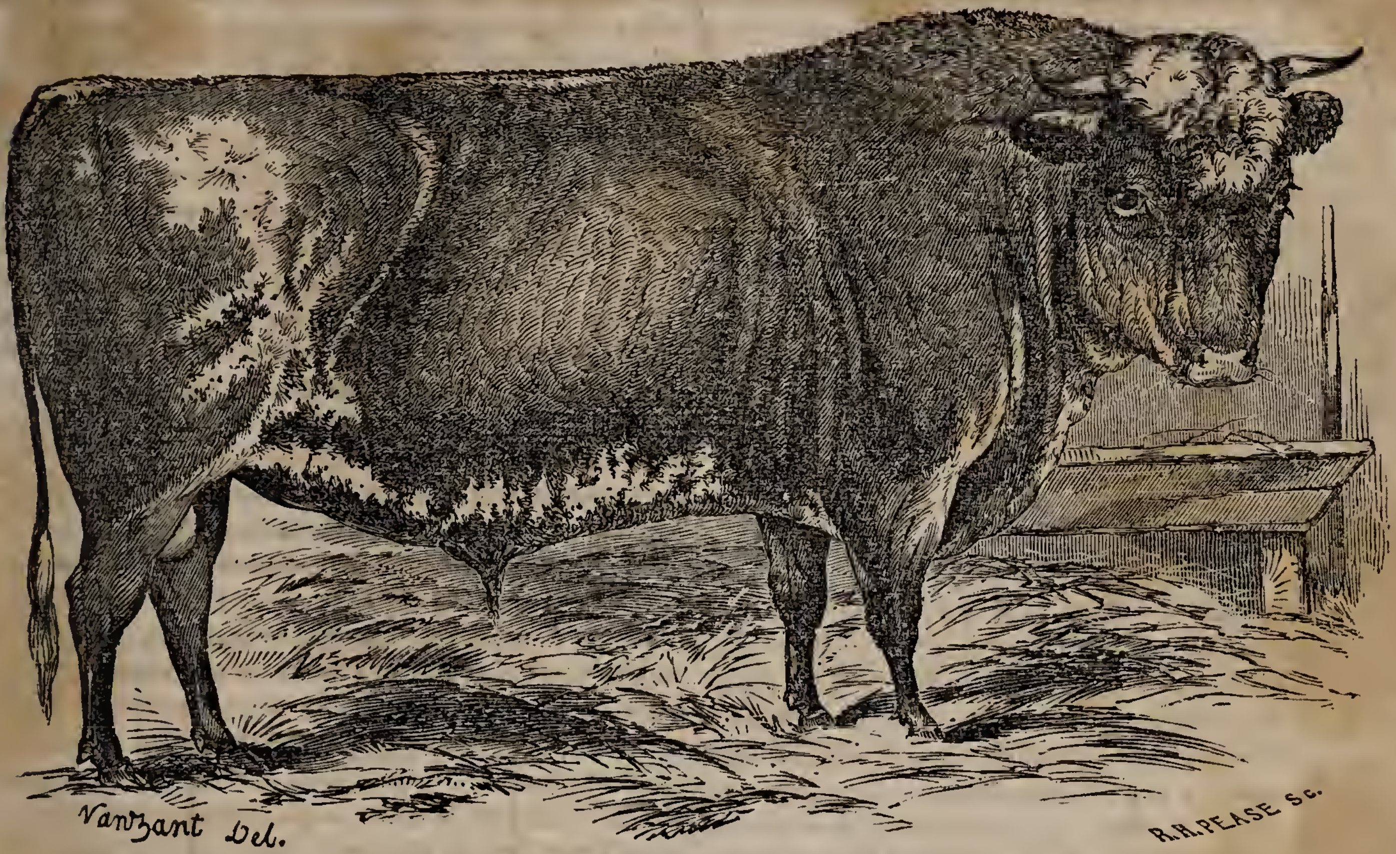
Under the tool-room I have a cellar, walled very thick and pointed, which is intended for a double purpose, viz: to keep *ice* through the summer, and vegetables for neat cattle in the early part of the winter; access to this cellar through a trap-door in the tool-room.

It may be remarked by some, that I have not appropriated any place to young calves. I have no necessity for it, as I keep all my cows in another barn; but should it be desirable, a small pen might be partitioned off in the mow adjoining the stable, which would be an excellent warm place for such tender stock.

On the east side of the yard I have a high board fence; between this and the road, about ten rods, is a thrifty young apple orchard, which is a protection from the east wind, while the barn shelters the yard on the north sufficiently, so that cattle may lie out comparatively comfortable, through the coldest day of winter.

I might enlarge considerably upon the facilities for making manure under cover, and the value thereof, but will add only a word. I have none of those unanswerable arguments, stern facts, derived from actual records to prove the efficacy of sheltering manure, but it is my firm conviction that the increased value from the stock which I keep in this barn, considering quantity and quality, pay me an annual interest of over 25 per cent on the entire cost of my cellar.

You doubtless will think that the sections of *lanes* are superfluous, but I may furnish you with a plan of my *cow barn*, at some future time, when I could give you a better idea of their relative position, than if I were less explicit in the present instance. I will remark, however, that the *north end* of my *cow barn* stands on the lane herein represented. Yours very truly. LEWIS S. TAFT.
Uxbridge, Mass., Jan. 19, 1852.


VanZant Del.
R.R.PEASE Sc.

Ayrshire Bull "Dandy."

The above cut represents the Ayrshire bull "Dandy," the property of J. C. Tiffany, of Coxsackie, Greene county, N. Y. He received the first premium in his class at the fair of the N. Y. State Ag. Society, held in Albany, 1850—also the first premium at the show of the American Institute in New-York city in 1851. He was imported by Mr. Saml. G. Ward of Lenox, Mass. He is a bull of superior points, great substance, and compact form. His color is dark red, with a few white spots. He is decidedly one of the best bulls of this valuable breed in the country.

Thoughts and Experience.

Eds. Cultivator—It is astonishing to me that farmers do not read agricultural works. It is uniformly the case, that when a man takes The Cultivator, or any other good work of the kind, you can tell it at once by the appearance of his place. Talk with him, and it will soon be evident whether he is a friend of improvement, for a man who never reads is never a wise man.

I have been a subscriber to Agricultural Papers for the last twenty-five years, sometimes taking as many as three, and have been the gainer by ten, yes twenty fold. I own a small farm of some 46 to 48 acres of working land. My crop last year was 326 bushels of wheat, 206 bushels oats, 350 bushels corn, 103 bushels potatoes, 21 tons prime hay, besides many other smaller products. The land in this section of Frederick county is second rate, being of the red sand stone formation. Many of my neighbors have twice as much land, and do not raise half as much—their soil is worn out, mine is improving.

I have plowed my corn land eleven inches deep in the fall, as that is the only time that the soil can well be plowed to such a depth. By this means five more inches of soil is exposed to the winter frost, becomes disintegrated and mixed with the top soil, and the roots of the corn have eleven inches instead of six, in which to find their nourishment.

Some years ago, I invited a friend to see my plowing. It was late in the fall, and the land was covered with a heavy body of grass, clover and timothy. He said to me, "why do you not let your cattle feed here, and not waste your grass in this way?" I replied that I wanted the grass which was being turned under, to feed my horses, to fatten my hogs, and some to sell. How is that, was the interrogation? I explained to him that in the first place it was necessary to *feed* the corn, and then that it would thrive, and repay principle and interest, and not only so, but would make provision for the wheat crop next year. To expect crops without something in the ground to produce them, is the height of folly; and thousands of farmers are laboring, like one beating the air, from ignorance of what preparation is necessary in order to insure fertility.

If the legislature of Maryland would pass a law, giving some good agricultural journal to every farmer in the state, and a dollar yearly to read it, and at the end of three years tax each one ten dollars, in nine cases out of ten the farmers would be largely the gainers.

I advise my neighbors to plant one row more of corn or potatoes, or something additional, to pay for a paper; but after all their apathy is surprising.

I do not think a man can be called a good citizen, or a useful member of society, who allows his land to lie a barren waste, and lives in poverty. His children are uneducated, often brought up in idleness and vice, and thus his example is handed down, a legacy of ruin to his posterity, and of injury to the community. Cannot this state of things be done away with? Wm. Todd. *Utica Mills, Md., Jan.* 16, 1852.

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Make few promises.

Acquisition of Knowledge.

The attention of the readers of the Cultivator has been repeatedly called to the importance of mental improvement. All will readily acknowledge, that it should be the constant care of the farmer to improve the soil, but the improvement of the mind,—the matter that should receive the first attention,—is delayed or entirely neglected. "These ought ye to have done, and not to leave the other undone." Farmers *should be improved* as well as farms, and their improvement should be attended to first, and then the other will be more easily accomplished.

When I was quite young, I marvelled somewhat to hear a young man say that he had never seen any wheat growing. He was intelligent and a skilful mechanic, and had always lived in a sea coast village, located in an improved agricultural district. Of course his knowledge of farming was extremly limited, and if, by any accident, he had been obliged to cultivate the soil for a subsistence, he would have had everything in regard to it to learn, and must have pursued his vocation under great difficulties, whereas if he had learned the theory previously, the practice could be much easier attained. The ignorance of some of our citizens in regard to all that appertains to agriculture would seem astonising to those not acquainted with their mode of life. A theoretical knowledge of agriculture certainly cannot be incompatible with the vocation of any individual. Such great changes are continually taking place, that the city gentleman may in a few years be the proprietor of some quarter section in a remote district, where his knowledge of ledgers and stocks would avail him nothing in gaining a livelihood "by the sweat of his brow." And the city belle of to-day, may be in after life an obscure individual in some back settlement, placed in circumstances in which she would give all her knowledge of polkas and pianos, if she knew how to make butter and cheese.

But the worst feature of the case is, that there is so much ignorance among farmers themselves, even in regard to the most important part of their business. And they seem contented to remain in ignorance. Many plead want of time for their inattention to the means of acquiring knowledge, when they spend hour after hour, in idleness or foolish gossip with their neighbors. A mistaken notion prevails to a great extent, that the boy when he finishes his school education is done with books, and must lay them aside for the implements of his business. It is certainly unwise to be so much engaged in labor as to find no time to read and study. Some time *every day* should be spent in reading something that will inform and strengthen the mind. And the mind should be trained to habits of thought and study, so that the information picked up here and there, may be appropriated, and result in good to the individual. This is not only a privilege that all may have, but it is a duty that all should perform.

With some it seems to be preposterous to pretend to be "wiser than their fathers were." The system of cultivation that has been handed down from father to son, will admit of no improvement, and must be pursued without any variation. They cannot get out of the old beaten track, but follow in the footsteps of their predecessors with a devotion scarcely equaled, and the same results follow,—deterioration of the soil, though in the first instance it was not so readily seen, as they cultivated a rich soil, that was not so easily worn out.

Again, the opinions of some men when once fixed in the mind, are to them as "unalterable as the laws of the Medes and Persians." And they will take their course in the management of their business, though reason and common sense should be disregarded. Such persons know too much to learn, and are ever ready to applaud or condemn the actions of others, according as they agree or disagree with their own ideas. But it is not enough that knowledge be acquired, that the individual be intelligent and well informed. It is of great importance to be able to adapt knowledge to circumstances, and to act understandingly and with judgment in the performance of business.

In the agricultural community there seems to be a lack of faith as to the good effects of reading and study. They do not see the necessity of it. And contented with their limited information, there is nothing to stimulate them to make efforts to obtain more knowledge. And the mercenary spirit that prevails to a great extent is opposed to intellectual progress. Many seem to think that it will do them no good,—dollars and cents being their standard of value,—to read an Agricultural Journal. and a dollar spent for that purpose is considered as thrown away. Others limit their means of information to a weekly political paper, and they cannot afford any more. The acquisition of agricultural knowledge should be attended to first by the farmer, but the means for general information should not be neglected, and farmers, as a class, should be well informed, for they have as much leisure time at their command as any other class of citizens.

If the young farmers of the present day would pursue their vocation more successfully than their fathers did, they must attend to the means of information, and not dissipate their mental energies in frivolous amusements, or in reading the trashy "yellow covered literature," that is scattered over the land, contaminating and cursing all that are interested in it. And there are, happily, indications that the next generation will avail themselves of all the means in their reach, to increase in knowledge. The circulation of agricultural periodicals and the sale of agricultural books, is a sign of progress, and though it is comparatively the few and not the many that are interested, yet important results are effected and great good accomplished. W. L. EATON. *Nashua, N. H.*

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MOISTURE BY DEEP PLOWING.—P. Morris says in the Farm Journal, that he broke up a stiff sod for corn, with a heavy plow drawn by four oxen. A subsoil plow followed, running down six or seven inches deeper. The whole work was so thoroughly performed, that a stick could be thrust down into the loose earth, in almost any part of the field, to a depth of fifteen inches. The summer was excessively dry, pastures were burnt and bare, and tillage crops suffered severely. But the corn on the subsoiled land continued green and luxuriant throughout the season.

French Merino Sheep.

Messrs. Editors—I send you a wood cut,* engraved from a Daguerreotype, of a group of French Sheep imported by Wm. Chamberlain, Esq., of Red Hook, of your state, and myself, one year since.

The buck "Matchless," represented in the above cut, is three years old, and weighed on the first of last March, 261 lbs. His fleece of one year's growth, was 20 lbs. 12 oz., after losing a portion of it on the sea voyage. As to the shape, constitution, thickness and fineness of wool, this buck is considered by all who have examined him, to be equal to any of the breed. He was my first choice in France, and was very much admired there, especially by some gentlemen from Australia, who owned large flocks of sheep, and were in France for the purpose of buying bucks to cross with their sheep, which originated in Germany. One of these gentlemen informed me that his number already reached 44,000, and that he intended to increase it until it reached 100,000.

This man alone wanted 100 bucks for the service of his own sheep. He also informed me that others from his country were making preparations to travel in France and Spain, for the especial purpose of selecting sheep, with a view to increase the weight of fleece, and if possible to retain the fineness. So you see that not only we "Americans" have the "sheep fever," but that it is rapidly spreading over almost the whole world.

The live weight of the ewes here represented, is about 125 lbs. each. The average live weight of our whole flock of this breed, after having been shorn, did not vary much from 100 lbs.

The average weight of fleece of the whole flock, 12 lbs. 8 oz. In selecting the sheep, I regarded a large size as a matter of secondary consideration, choosing those that would produce the most fine wool, according to the cost of keeping.

It is believed by many that the French Merinoes require more than ordinary feed and attention, to keep them in good condition; but my experience with them, thus far, leads me to the conclusion that they will thrive well on ordinary keeping. They require nothing but a good pasture during the summer season. I gave mine nothing more. They are well adapted to our climate, and will bear exposure to storms equally as well as any sheep in the country. A portion of ours were turned off to pasture last June, and came to their winter quarters looking remarkably well. They had no grain of any description, nor were they sheltered from a single storm during the season.

Although the French sheep possess many desirable qualities, I should be unwilling to say that they are *greatly* superior to all other breeds in every particular, but believe that all experienced and impartial judges admit that they possess the following desirable points, viz:

1. A good vigorous constitution.
2. That they carry a heavy fleece of wool, of a fair grade, and
3. That they are gentle and docile in their dispositions, with an easy propensity to fatten.

It is my belief that the above qualities are better combined in the French sheep than in any others; but where wool alone is the object, I am of the opinion that there are other varieties of the Merino, of a less size, which will yield as much or more wool, and of a finer quality, in proportion to their size, and consequently the cost of keeping, than those under consideration.

There are, perhaps, some few improved flocks of the old Spanish stock, that will compare favorably with the French sheep, for the profitable production of wool; but the variety to which I have more particular reference is the Silesian Merino, of which I will send you an engraving, and describe in some future number. Geo. Campbell. *West Westminster, Vt., May* 20, 1852.

Pruning in Autumn.—The late S. W. Cole, who strongly recommended autumnal pruning for fruit trees, says, "Thirty-two years ago, in September, we cut a very large branch from an apple tree, on account of an injury by a gale. The tree was old, and it has never healed over, but it is now sound, and almost as hard as horn, and the tree perfectly hard around it. A few years before and after, large limbs were cut from the same tree in spring; and where they were cut off the tree has rotted, so that a quart measure may be put in the cavity."

Increasing new Kinds of Wheat.—Scarce and valuable kinds of wheat may be more rapidly increased by dividing the roots or stools, than by the ordinary process of simply sowing and re-sowing. A very successful experiment is recorded as performed some years ago in England, with the stool from a single grain of wheat. It was sown early in summer, and tillered so much that it was divided early in August into 18 parts. In the autumn, these were again divided into 67 separate plants. In the spring the tillering went on rapidly, so that 500 plants were finally obtained, so that they yielded 21,109 ears, or about 40 to each plant. The whole product was a little short of a bushel. The reader will understand that the best possible chance was given, both in soil and culture.

Dwarf Apples.—The Genesee Farmer states, that a dwarf apple tree, seven years planted, and ten years old, the tree not over three feet high, growing on the grounds of Aaron Erickson, of Rochester, produced a Fall Pippin *sixteen inches* in circumference and weighing *twenty-six ounces*. Two or three others were nearly as large. Apples grow rather larger on dwarfs than on standards. There is one interesting question in connexion with this subject, that we would like to have answered, viz: At what price could such apples, thus grown on dwarfs, be afforded per bushel, as a general average for seasons and cultivation and the cost of a crop per acre,—and the comparative value with other apples in market?

A Practical Writer.—Every intelligent farmer knows perhaps that one of the best and most complete books ever written on agriculture, is Stephens' Book of the Farm. The reviewer of this work in the English Journal of Agriculture, gives a little insight into the reason of this superiority, by informing us that besides his eminent scientific knowledge and a remarkable facility for popular writing, the author has been in the habit of sowing, stacking, feeding the threshing mill sowing grain and grass seed, grooming his own horse, guiding the plow, all with his own hands; and that in fact "the only operation that a farm laborer has to do, that Mr. Stephens cannot do well, is riddling corn."

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* The cut has not come to hand. It will be published hereafter.

Culture of Indian Corn and Oats.

We have been favored by the writer, with the following statements which he furnished to the Windsor Co. (Vt.) Ag. Society, for publication in the Cultivator.

Gentlemen—There are some farmers whose intelligence and skill in agriculture I greatly respect, who doubt that there can be one hundred bushels of Indian corn grown upon one acre of land. But my own practical experience and improvement in agriculture, have proved, not only to myself, but to all who are conversant with the following manner of cultivation, that there can be such crops of corn raised.

In order to produce a great crop of corn, as well as any other large crop, *deep plowing* is indispensably necessary, and plow in a coat of manure at each plowing, in order to mix the manure well with the soil, observing at each time of plowing, to go equally as deep if not deeper, than it had been plowed before. When I calculate to grow a great crop of corn, I begin to prepare the ground the year previous. The first year I put on from 40 to 50 common ox cart loads of coarse or long manure to the acre, in the spring of the year, and plant it with corn. The result of the first crop, with good attention, is generally about 60 bushels to the acre. The next spring I apply full 50 loads of same kind of manure to the acre; this last coat will bring the crop to maturity in the late stages of its growth, while the previous coat being well mixed with the soil, will start the crop with the greatest luxuriance in the first stages of its growth. I plant from the 18th to the 20th of May, rows four feet, and hills two feet apart; at the first hoeing, which I have done with great care, the stalks are reduced to three in each hill; then a mixture of lime, plaster, and hard wood ashes, unleached, a gill to each hill of corn is immediately applied. After the second hoeing, plaster alone is applied, a table spoon full to each hill. It is hoed the third time, and each time with care and neatness, using the cultivator, and elevating the earth but slightly around the stalks, keeping the surface clean from weeds and nearly level. The seed is a mixture of the yellow eight rowed and Brown corn, so called, and when the two kinds become blended, it imparts a deep, rich chocolate tinge to the whole. The cob is small, the ears are long, well filled out, and the kernels deep, close, and compact. Such is the manner of cultivation upon three and one half acres the past season, *one acre of which yielded* 92 6-7 *bushels, another acre* 88 4-7 *bushels.* These acres were taken one from each side of the field the longest way; through the centre of the field, lengthwise, is a slight elevation or ridge, on which the crop was not quite as good.

Had it not been for the severe drouth late in the summer, and had it set as well for ears as usual, I have no doubt but there would have been over 100 bushels to the acre on the whole field, as it was as heavy a growth as a field of four acres I had in 1849, which produced 104 bushels to the acre, but it set to ears much better than the field of the present season. The soil where I grow my corn, is of the alluvion bottom lands upon the Connecticut river, and no where in the known world, is there a better soil for the production of this valuable grain, but it will not grow even here spontaneously; it requires care and labor, skill and judgment, and these rightly exercised upon such a soil, will be annually amply remunerated in full compensation. I present these two acres of corn for the first and second premiums on the first and second best acres of corn.

Oats—I also present, gentlemen, two acres and 15 rods of oats, which produced within a fraction of 174 bushels, weighing 34 lbs. to the bushel. The soil is the same as my corn land, alluvion bottom land; it was planted to corn the previous year with 50 loads manure to the acre spread broadcast and plowed in ten inches deep; it was plowed again ten inches deep, last spring, and sowed to oats about the 20th of April, $1\frac{3}{4}$ bushels of seed to the acre; harrowed thoroughly and rolled down smooth; the straw grew so rank and stout that it stood up well, and the oats, when reaped, stood over six feet high on an average, with long heavy heads and well filled. I will here remark that it is a mistaken notion to seed with more than two bushels of oats to the acre, whenever the soil is, or has been well manured the year previous; by seeding thus sparingly, the straw has more and better opportunity to expand and grow larger and stronger, and the crops will be less likely to lodge; the heads will mature better, and more bushels will be obtained to the acre. Another important consideration in seeding oat land sparingly is, if we are desirous of seeding to grass, the grass seed will take root much better than when the oats are sown thick, and fall down in consequence. It is a common saying among farmers, that oats are a bad crop with which to seed down to grass; I have always practiced seeding to grass with my oat crop, and never even in the dryest seasons have I lost a single grass seeding.

These two acres and 15 *rods of oats, yield at the rate of* 83 *bushels to the acre. I offer them for the first and second best acres of oats.*

Now if farmers would consider and consult their best interests, and would cultivate their farms in some way similar to the above statements, they would not only raise their corn and other grains with half the labor, but after the land is laid down to grass, it will yield double the quantity of hay, and will hold out three times longer than land cultivated in the ordinary way.

No good farmer will half starve his horses, cattle, sheep or swine; neither should he half starve his land. If he does, in the end it will more than half starve him. J. W. Colburn. *Springfield, Vt., Jan.* 12, 1852

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Unruly Cattle.

Eds. Cultivator—As your valuable paper is for enlightening the farming community, and a little information, however simple, communicated at times to one another, is often found very useful, I will throw in a small share for the benefit of your subscribers. Being troubled with some unruly cattle, that defied all my attempts to subordination, I hit upon the following remedy which has proved very successful. I took an old boot cut off the foot, slit and spread it out, and fastened it in front of their eyes by means of a short string, passing through the straps and around their horns. The animal though a little "blinded," seems to be at no great inconvenience. The remedy though simple may be found useful if you consider it worth inserting. J. P. Phillips *Florida, Montgomery co., N. Y.*

Wire Worms.

EDS. CULTIVATOR—If you know of any better way to get rid of wire worms, than to wait with patience till they have had their day and generation, I would like to have you publish it. I will give you a part of my experience with them. In the spring of 1848, I came in possession of the farm that I now occupy, nearly the whole lying upon what would be called a limestone ridge. Adjoining my barn is a small field of a little over two acres, that had lain in pasture two years. I plowed it up in the spring, and planted with corn; the worms cut it some, but not very badly. We got something over fifty bushels per acre that year.

The spring of 1849, we put about 40 loads of manure to the acre, (excepting three-fourths of an acre that took the wash from the barn-yard,) thinking to plant corn, cut it up in the fall, sow to wheat, and seed to grass. We did plant it, but the worms spoiled it entirely. Full one half of it they ate in the kernel before it came up, while a large proportion of what did come up, they soon killed. We then the last of June, plowed the ground again, and sowed to buckwheat—got a pretty fair crop, 87½ bushels. I consider buckwheat a poor substitute however for corn or wheat, on land that is good for either.

I then thought I would try fall plowing as late in the season as I could. Accordingly in December following, I set a hand to plow it. He plowed about three-fourths of it, when the ground froze so hard we were obliged to quit it. We plowed the ground north and south in the fall; and in the spring of 1850, thinking to pursue the same course, we had contemplated the season before—that is corn, wheat, and then seed down, we plowed the whole field through east and west. The part that was fall plowed as well as that that was not, we planted again to corn. This season I took bones and boiled them in lye, until the whole mass became like a paste; one half of this I mixed in ashes enough to dry it; for the other half I used plaster. At planting we put a gill of this mixture in each hill for eight rows, and then missed eight through the field; but the worms again spoiled the crop; and what was contrary to my expectations, there was scarcely a stalk left as far as we fall plowed, while there was a few where we did not. We then thought that if the creatures required vegetable food, we would try and starve them out; so we went over the ground several times with a gang plow, and kept it perfectly naked until harvest; at this time a crowd of work coming on, we neglected our special trouble for a time, when going on to the field after harvest, judge of my surprise to find the ground thickly covered with buckwheat, just coming up. I began to think we had two plagues on our hands instead of one.

By the time we could spare a team to go over the ground again, the buckwheat was too large for the gang plow, so we plowed it under with a common plow; the ninth of September sowed it to Soule's wheat, and plowed in with a gang plow. The worms injured about ¼ of an acre considerably—the rest was decidedly the best wheat we had; it was thrashed with the rest of our wheat, the whole averaging twenty-nine bushels per acre.

The worms have injured wheat considerably the past fall; they are decidedly the greatest pest we have.

I might perhaps mention that I applied the bone mixture to six rows through a field of eleven acres, but could see no perceptible difference in the growth of the stalks or the yield of corn. The whole was good, averaging sixty four bushels per acre.

Perhaps upon poorer land, or a soil of a different chemical composition, the result might have been different. JOHN STRICKLAND. *Elba, N. Y., Jan.* 9, 1852.

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History of the Short-horns.

In the June No. of the Cultivator, there is an article headed "Reviewer Reviewed," by SANFORD HOWARD, in which he introduces my name. It occurs in the article by him, in reply to "Platanus," of the April No., and the sentence is:

> "Even AMBROSE STEVENS, to whom the writer, [Platanus] of the review, [of MR. EVANS' Dairyman's Manual,] will not probably object as authority, has said, (at least by implication,) that those stocks, [Sir JAMES PENNYMAN's and Sir WM. ST. QUINTIN's,] came from Normandy. (See his article on the "History" of Short-horns, in the Trans. of the N. Y. State Agricultural Society, 1849.")

Had my words been quoted, I should have been content, certain that they would have contradicted the misconstruction of their meaning. I quote them:

> "The ancient family of the Aislabies, which came into England from Normandy, with William the Conqueror, established themselves prior to 1300, at Aislabie, on the river Tees, in the county of Durham, and the manor, their estate, was called after the family. As early as 1600, the family was known to possess a most extraordinary tribe of cattle."

These words occur in an account of a particular tribe of Short-horns, first known in their history as being in the possession of the family of the Aislabies. I thought proper to say of this family, that they were Norman in extraction—had been centuries in England, and that after having been 300 years in Durham, they possessed an extraordinary tribe of cattle.

In noticing this account of mine, in the September No. of the Cultivator, 1850, MR. HOWARD, then an editor of it, says: "the most natural inference from the tenor of the language would be, that they were Norman Cattle, brought into England by the Aislabies."

In a personal interview with Mr. HOWARD, I explained to him verbally what I meant, and supposed he would be just enough to himself to do me justice. This he never saw fit to do. And now, at the end of nearly two years, he, as a correspondent of the Cultivator, charges me with saying, ("at least by implication,) that those stocks, [St. Quintin's and Pennyman's] came from Normandy." My account did not mention St. Quintin or his cattle at all; stated that the Pennymans got their cattle of the Aislabies; made the cattle of the Aislabies to be Short-horns, and therefore, of necessity, made the cattle of the Pennymans to be Short-horns.

I do no not intervene in this altercation between PLATANUS and MR. EVANS, or as it now stands, MR. HOWARD added. Who PLATANUS is, I know not. I read his article when it first appeared, and have not re-perused it. Whether he would receive me as authority, as MR. HOWARD alleges, I cannot say.

If I am to be cited as authority, I ask that I may be quoted, that my words may speak for themselves, or my *known* meaning stated.

I hold that the Short-horns, when the COLLINGS commenced to breed, were, and still are, a pure and original race; were not indigenous to England, but have for centuries been there, as early, doubtless, as 900 or 1,000 years ago; that they are continental in their origin, and came from the region of country extending from Holland to Denmark, inclusive. *As a breed*, they are, and ever have been pure; *as a breed*, they never had Alderney or Norman blood mixed with them; although continental in origin, they have had no connection with the Short-horns of the continent since as early as 1600; and all Short-horns recorded in the Herd Book, are purely of that kind, except such as may possess the Scotch Galloway blood, introduced by CHARLES COLLING. These Scotch crossed ones constitute but a small portion of the whole of those recorded in the Herd Book.

All these points can be established by proof as conclusive as history ever affords for any of the world's facts. AMBROSE STEVENS.

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Leached Ashes on Wheat.

EDS. CULTIVATOR—In the fall of 1850, I tried an experiment of putting leached ashes on wheat,—which convinced me that they were of great value on said crop. After I had my ground plowed which was intended for the reception of the seed, I hauled on the ashes broadcast, about one two horse wagon load to every four square rods. I served about half of the field the above way. Sowed on one bushel and three pecks of wheat. Dragged in the wheat on the unashed half of the field as as on the ashed half, by going over lengthwise twice with the common triangular harrow. Six or eight weeks after the wheat was up, the difference could be very easily detected. When harvest came, the result was, on the ashed part, clean straw, while the other was more or less struck with the rust; the berry more plump, and the ears longer. In fact the wheat was one third better where the leached ashes were applied. There are many potash makers in this country, who would thank the farmer for hauling the leached ashes out of their way. In some parts of the country they are purchased at from five to ten cents a bushel; and hauled eight and ten miles, and then applied with profit to crops. JOHN DIEHL. *Kagy settlement, Bristolville, Trumbull co., Ohio, Dec. 31, 1851.*

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HUSSEY'S REAPER.—The London Chronicle, speaking of this powerful machine and its performance in Herefordshire in a field of clover, says, "The manner in which its resistless blades swept through this crop, was a matter of great astonishment. It might be compared to the sweeping of a strong wind over the surface of a lake, so rapid and comparatively effortless was its progress. * * A little incident which occurred, speaks volumes as to its efficiency. A Herculean figure in a smock frock, after earnestly contemplating the execution performed before his eyes, took his reaping hook and deliberately broke it over his kee, throwing the pieces away in despair."

New-York State Agricultural Society.

At the June meeting of the Executive Committee, the President, Mr. Delafield, and Mr. Lee, were appointed a committee to make arrangements for the TRIAL OF IMPLEMENTS, at Geneva, and to designate the day for its commencement; and E. P. Prentice of Albany, and George Geddes, of Onondaga, were added to the list of Judges for that occasion.

The time for the trial will be fixed as soon as the state of the crops will admit, and be announced in the public papers.

The following persons were appointed Delegates to the National Agricultural Convention, to be held at Washington city, on the 24th June:

Henry Wager, President, Oneida; James S. Wadsworth, Livingston; Lewis F. Allen, Erie; E. P. Prentice, Albany; John A. King, Queens; Francis Rotch, Otsego; J. M. Sherwood, Cayuga; J. P. Beekman, Columbia; Anthony Van Bergen, Greene; George Vail, Rensselaer; Lewis G. Morris, Westchester; Thomas Bell, New-York; Hon. J. A. McElwaine, Wyoming; Lyman B. Langworthy, Monroe; Wm. Kelly, Dutchess; Luther Tucker, Albany; Charles Lee, Yates; J. B. Burnet, Onondaga; E. Corning, jr., Albany; Hon. James Monroe, New-York; Hon. Elijah Risley, Chautauque; A. J. Downing, Orange; Winslow C. Watson, Essex; Maj. M. R. Patrick, Jefferson; Henry Holmes, Washington; B. P. Johnson, Albany.

APPOINTMENTS FOR THE STATE FAIR.

Theodore S. Faxton was appointed General Superintendent of the grounds, with charge of carriage entrance—John Butterfield, superintendent of small gates and buildings—Thomas Bell, of the Cattle department—J. B. Burnett, of the Horse—Lyman Sherwood, of the Sheep—Levi T. Marshall, of the Swine—E. E. Platt, of the Poultry—Silas D. Childs, of Floral Hall—R. S. Doty, of Manufacturer's Hall—David A. Lyon, of Mechanic's Hall—Israel Denio, Dairy Hall and samples of Grain—David Gray, Vegetable Tent—J. S. Peckham, of Machinery and Implements on the ground.

The Sheriff of Oneida county, John R. Jones, Esq., was appointed Marshall.

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Exhibitions and Cattle Shows for 1852.

NATIONAL.

American Institute, New-York.—Exhibition opens at Castle Garden, Oct. 5. Cattle Show, Oct. 19, 20, 21.

American Pomological Congress.—Commences its session at Philadelphia, Sept. 13.

STATE.

New-York—At Utica, September 7, 8, 9, 10. Trial of Reapers, Mowing Machines, &c., at Geneva, about the middle of July.

Ohio—At Cleveland,	Sept. 15, 16, 17
Michigan—At Detroit,	Sept. 22, 23, 24
Indiana—At ———	Oct. 19
Pennsylvania—At Lancaster,	Oct. 20, 21, 22
Georgia—At Macon,	Oct. 19 to 23
Maryland—At Baltimore,	Oct. 26, 27, 28, 29
Wisconsin—At Milwaukie,	Oct. 6, 7, 8
Vermont—At Rutland,	Sept. 1, 2, 3
Canada West—At Toronto,	Sept. 21, 22, 23, 24
Rhode Island—At Providence,	Sept. 15, 16, 17

COUNTY SHOWS—NEW-YORK.

Clinton—Keeseville	Sept. 22, 23
Cortland—Cortland Village,	Sept. 15, 16
Genesee—Bergen,	Oct. 6, 7
Herkimer—Herkimer,	Sept. 28, 29
Jefferson—Watertown,	Sept. 16, 17
Madison—Eaton,	Sept. 22, 23
Otsego—Morris,	Sept. 22, 23
Putnam—Carmel,	Oct. 5, 6
Wayne—This county holds two fairs—one at Wolcot,	Sept. 21, 22
The other at Palmyra,	Sept. 28, 29
Saratoga—Mechanicsville,	Sept. 15, 16, 17
Rensselaer—Troy,	Sept. 22, 23, 24
Essex————	Sept. 20, 21 22
Suffolk—Huntington,	Sept. 22
Seneca—Waterloo,	Oct. 14, 15
Monroe—Rochester,	Sept. 29, 30
Ontario—Canandaigua,	Sept. 29, 30

TOWN SOCIETIES.

East Bloomfield,	Oct. 5, 6
Galen,	July 3

MASSACHUSETTS.

Berkshire—Pittsfield,	Oct. 6, 7

CONNECTICUT.

Middlesex—Middletown,	Oct. 6, 7, 8

VERMONT.

Franklin—St. Albans,	Sept. 8, 9
Windham—Fayettville,	Sept. 15, 16

NEW-JERSEY.

Burlington—Mount Holly,	Oct. 6

PENNSYLVANIA.

Berks—Reading	Oct. 1
Bucks—Newtown,	Oct. 7, 8
Montgomery—Norristown,	
Philadelphia—Near Philadelphia,	Sept. 30, and Oct. 1
Susquehanna—Montrose,	Oct. 6
Northumberland—Northumberland,	Oct. 7, 8

OHIO.

Cuyahoga—Cleveland,	Oct. 6, 7

MICHIGAN.

Lenawee—Adrian,	Oct. 6, 7

Mr. Morris' Cattle Sale.

Mr. Morris' third annual sale of improved breeds of stock, took place at Fordham, on the 9th of June, agreeably to advertisement. There was a large attendance of company from various parts of the country, and the prices obtained, show that the interest in improved stock was well sustained. We annex a list of the sales.

Short-horn Cows, Heifers, and Calves.

1.	Rose, 6 years old, Gen. Cadwallader, Penn.,	$80
2.	Fan, 9 years, Gen. Cadwallader,	100
3.	Woodbine 2d, 4 years, do	105
4.	Pride, 17 years, Mr. Firmstone, Easton, Pa.,	60
5.	Jane, 16 years, Mr. Taber, Dutchess co.,	55
6.	Woodbine, 16 years, A. Van Ingen, Jr., N. J.,	50
7.	Alice, 2 years, Mr. Schellingford,	80
8.	Chinchilla, 2 years, Mr. Firmstone, Easton, Pa.,	85
9.	Zepher, 11 months, J. D. Thorpe, Albany,	90
10.	Susy Walker, 3 months, Mr. Simpson,	50
11.	Agnes, 3 months, J. D. Thorpe,	120
12.	Miss Spencer, 6 years, (¼ Dutch) Mr. Johnson, L. I.,	130
13.	Miss Spencer 2d, 3 months, (⅛ Dutch,) Mr. Wilmerding,	90

Short-horn Bulls.

14.	Lord Eryholme 2d, 9 months, J. D. Thorpe,	270
15.	Kossuth, 6 months, Mr. Colegrove,	155
16.	Gladiator, 2 months, Mr. Hoopes, Chester Co., Pa.,	150
17.	Cato, 22 months, Mr. Firmstone, Easton, Pa.,	180
18.	Ajax, 2½ months, Mr. Thorndike, Mass.,	55
19.	Hercules, 2 months, Mr. Cooper,	25
20.	Orion, 1 month, Mr. Rives,	30
21.	Medley 3d, 2 months, Mr. Keim, Penn.,	50

Lamartine rented for one year to Calvin Fletcher, Indianapolis, for $200.

Devons.

22.	Gazelle, 18 months, Mr. Wainwright, Dutchess co.,	90
23.	Belle, 5 months, Mr. Wilmerding,	55
24.	Nell, 2 months, Gen. Cadwallader, Penn.,	35
25.	Fairy, 1½ month, do	35

Ayrshires.

26.	Rose, 4 years, Mr. Firmstone, Easton, Pa.,	125
27.	Effie Deans, 3 years, Mr. Maitland,	80
28.	Miss Chrystie, Mr. Haines,	65
29.	Highland Mary, 2 years, Mr. Minot,	70
30.	Caledondia, 2 years, Mr. Maycock,	85
31.	Jessie, 2 years, Mr. Schellingford,	65
32.	Bessie Bell, 2 years, Mr. Maitland,	100
33.	Mary Grey, 2 years, Mr. Simpson,	80
34.	Nannie, 2 years, Mr. Minot,	80
35.	Jennie Deans, 2 years, Mr. Wilmerding,	80
36.	Bonne Lassie, 1 year, Mr. Schellingford,	55
37.	Maggie, 1 year, Mr. Simpson,	30
38.	Lucy, 1 year, Mr. Clift, Putnam co.,	25
39.	Lilias, 1 year, do	25
40.	Fan, 1 year, Gen. Cadwallader,	55
41.	Sally, 1 year, Mr. Wilmerding,	25
42.	Rose of Ayr, 2 weeks, Mr. Harvey,	12.50
43.	Robert Burns, 2 years, Mr. Russell,	90
44.	Sir Walter Scott, 9 months, Thomas Evans,	80

South-Down Sheep.—Three yearling Rams were rented for one season, at $37.50 each. Two yearling Rams, were sold at $35 each—one to Mr. Clements, Philadelphia, and the other to Thomas Beekman of Columbia Co. Two ewes to L. Spencer, at $15 each—two to Mr. Cadwallader, $12.50 each—one ewe lamb to do $7.50—three to Mr. Stone at $8 each—one ram lamb, to do. $6.

Suffolk Pigs.—Five boars were sold, at $40, $20. $15, $10, and $30. Nine sows at prices varying from $20 to $77.50. Nine pair of pigs, from $8 to $25 per pair.

Essex.—Two pairs pigs brought $32.50 each, and a third pair, $30.

The Horticulturist for June.

We cannot perhaps, do our readers a more acceptable service, than to present occasionally a brief abstract of the successive numbers of this magazine, unrivalled as it is for the amount of its horticultural facts, experiments, and intelligence—especially if it should induce those who do not possess the privilege of access to its pages, to become subscribers.

American versus British Horticulture.—The *leader* points out vividly the distinction between the two. The editor states that our practical gardening is almost wholly in the hands of foreigners—that not three per cent of all the working gardeners in the United States, are either native or naturalized citizens—most being Irish, a few Scotch, and fewer still English and Germans. As a consequence, their practice is not adapted to our climate—failures result—and employers are discouraged. They cannot readily change the notions in which they have been educated. They have been from childhood led to regard as the great evils of the art, "damp, wet, want of sunshine, canker," while the great causes of failure with us, are "drouth, hot sunshine, great stimulus to growth, and blights and diseases resulting from sudden checks." As an example of bad adaptation, a large vinery, 200 feet long, was erected in one of our cities in the middle states,—under a warm bank, facing the sun, with a full exposure, just as it would have been placed in Britain, without provision for either sufficient ventilation or water. The result was perfectly natural. "The vines were burnt up with light and heat, and starved for air and water." "We pointed out how the same money, applied in building a span-roofed house, running *north and south*, instead of east and west, and treated by a person who would open his eyes to the fact, that he was no longer gardening in the old, but in the new world,—would have given *tons* of grapes, where only pounds had been obtained."

Liquid Fertilizer for choice Plants.—A correspondent states he has found a very valuable fertilizer in the solution of *sulphate of ammonia*, half an ounce being dissolved in a gallon of water. This, weak as it is, will kill the plants if applied daily—they are therefore only watered once a week with it, and once each other day with water. Applied to *strawberries*, they grow luxuriantly, twice as large as where unwatered, and much larger than where watered with water alone. *Peas* were a week earlier, and much stronger in leaf and pod. Sickly *dwarf pear trees* were rendered luxuriant. *Dahlias* and *Fuchsias* grew with great vigor, and flowered brilliantly. These experiments are worthy of repetition, although experiments with specific manures often utterly fail, with a variation in soils and circumstances.

Severe Winter and Rare Evergreens.—H. W. Sargent, of Fishkill, N. Y., gives a statement of the effects of the past severe winter on his collection of rare evergreens. Some species, as for example the Deodar, which for several previous years, had stood uninjured, were considerably browned, the thermometer sinking to 13° below zero. Among those evergreens which past results induce him to consider as "fairly hardy," that is, by the time they are three to five years old, are the following:—Himmalayan Spruce, Pinus excelsa, Cedar of Lebanon, Japan Cedar, (on its own roots,) Stone Pine, Cephalonian Fir.

Insects and Pear Blight.—Prof. Turner of Illinois, thinks he has discovered the cause of the western pear and apple blight. He finds little white specks on all parts of the tree—as every one has observed—but some of these are larger than the rest, appearing like a "mite of mould" on the bark. These he finds, by the use of the microscope, to contain "infinitessimal" eggs in vast numbers, which subsequently hatch into microscopic insects. They appear to exude a poison, which destroys the bark beneath, leaving small holes like the prick of an awl, and are in short the cause of blight, that is, in other words, death. As many close observers, with powerful microscopes, have never discovered these punctures in diseased trees, we may fairly infer, that if these insects cause the death of Prof. Turner's trees, they do not of most other peoples. He has tried ineffectually to destroy them with "soap, ley, ashes, lime, copperas, sulphur, plaster, tobacco, spirits turpentine, salt, coal-tar, charcoal, assafœtida, and a whole apothecary shop of other drugs." He calls for the observations and experiments of others. He proposes for this insect the elegant name of "pear devil."

Peeling the Epirdermis of the Cherry Tree.—Some of our readers know very well the disaster which often befalls cherry trees in the west, by the bursting of the bark. Prof. Turner says that since he adopted the practice of peeling off the epidermis, or thin dead exterior skin of the bark, he has not lost a tree, except a small one killed by winter, from peeling in autumn.

Culture of the Calceolaria.—An excellent practical article on the culture of this interesting ornament, by which the finest variegated plants may be obtained "four feet in diameter with over a hundred flower-stems," is too minute and extended for even a brief outline. We copy, however, the following hints, as they apply well to sowing all small flower-seeds:—"Cover very slightly, and remember never to allow the surface of the soil to become dry. Cover it over thinly with moss, to prevent evaporation. There is generally great difficulty complained of in getting the seed up. It is generally sown and watered—and watered again when dry—and so on, and probably never comes up at all. The simple fact is, the seed when first damp begins to germinate, and if it is then allowed to become dry, it is of course, killed in the germ. Keeping it constantly damp will obviate this."

Transplanting Evergreens.—A good article on this subject urges (what we have long since endeavored to enforce) "*that the roots, while out of the ground, should be kept moist—that they should never for a moment even, become dried during the proceess of transplanting.*" Hence a rainy day is recommended, in all cases, and especially where the roots are denuded. A few experiments are given. A long screen of Arborvitæ were set out in a stormy week, with the sod on. Six were set aside in a tub of water—four were left exposed to a drying wind. These four only died, out of two hundred and ten. The six, after three weeks neglect in the water, all survived. Again, fifty Norway Spruces, were set out in a moist day. One, by mistake, was left, and received a few hours of sunshine—this only died. [We have succeeded well with some sorts, brought long distances, by insisting on the instant immersion of the roots in water, as soon as up—packing in wet moss, kept soaked with water—the roots plunged in mud as soon as received, and *laid in*—and again mudded, and the earth well settled with water, when transplanted. Removing *plenty* of earth on the roots—an infallible mode,—besides preserving all the small fibres, keeps the roots constantly moist. Eds. Cult.]

Vines for Verandas.—The *Prairie Roses* are recommended as best for this purpose—among which the Linnæan Hill Beauty, (light rosy blush,) Triumphant, (lively red,) Baltimore Belle, (white,) and Queen of Prairies, (rosy red,) all very double, and profuse bloomers, are highly commended. They grow rapidly, and will cover a veranda the second season. The Chinese Wistaria, the Chinese Honeysuckle, and the Dutchman's Pipe, are also highly approved. The common sweet-scented honeysuckle is objected to on account of insects.

Salt for Quinces.—A top dressing of two quarts for each tree, applied in spring, dissolves slowly, without injury to the tree, improving both tree and fruit.

Tomatoes.—A Schenectady correspondent prunes off every few days, all the side shoots of his plants, leaving four main branches, which are staked up, and which grow seven to nine feet in a season in consequence. He states that he raises earlier, better, and more tomatoes, than by any other mode.

ANSWERS TO INQUIRIES.

Husk Beds---Cotton Mattrasses.

[The following has been kindly furnished by an intelligent female friend, in answer to the inquiry of our Tennessee correspondent.]

Take the *inner* husks at *early* husking time, before there is any danger of mildew from autumn rains—and strip them through once or twice with an old three pronged dining fork. Ten bushels will yield enough to make a good bed. Twenty bushels will not be too much for a good thick mattrass. But I much prefer a simple bed, as they can be so easily renewed each season, by the addition of one or two bushels of fresh husks. When these cannot be obtained, I wash the husks and dry them in the sun, which renders them sweet and free from dust.

Cotton mattrasses may be made by placing the tick in a common quilting frame, in the same manner as we do a quilt; then laying on cotton batting with great care, so as not to have any hard, uneven spots in it,—then tack it through, with a packing needle and some strong carpet warp, in spaces of eight or ten inches apart. Such an one, *well* made, will continue good for at least five years, and then bring nearly quarter the original cost, as old rags.

I have recently heard of another kind of domestic manufacture in the form of *splint* beds, but not having sufficient knowledge of them, to write definitely on the subject, I will defer it until the next number of the Cultivator. E. S. *Macedon, 5th mo.* 22, 1852.

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Lice on Colts.

I should like to have you tell me through the Cultivator, what will kill lice on colts, and oblige Geo. M. Barber. *New-Hartford, Conn.*

It is said that horses become lousy from hens, when the roost is too near the stable. It is worthy of inquiry whether they are infested by other species of lice—requiring different treatment. A skillful agricultural friend informs us that he has found two remedies effectual for this difficulty—the first, washing the animal in a decoction of tobacco, which needs repeating two or three times to be complete; and secondly, rubbing dry ashes all through the hair, and then turning the animal out in a rain storm—this is a rather sharp remedy, destroying a part of the hair. Cole, in his "Diseases of Animals," says that horses badly infested have been at once relieved by soaking all over in "new rum." The removal of all litter which may contain lice, whitewashing walls, and brushing, washing and oiling harness, must not be overlooked, in connection with the remedies.

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Grub in Cattle—Garget.

1. What causes the grub in the backs of cattle. 2. Is it injurious to the cattle. 3. What will prevent it? I find it more likely to be on cattle of thin flesh than in fat cattle—why is this?

4. What will cure the garget in cows—can they be cured after having been affected a year, so as to be good milkers again? J. P. Holt. *Lyme, N. H.*

The grub is caused by the gad-fly, which deposits its eggs during summer, in the hide, along the back of cattle. The larva shows itself conspicuously early the following spring. We cannot say what amount of injury it causes—under ordinary circumstances, farmers generally do not regard it as a serious evil, and do nothing for its removal. It is said that the respiratory organs of the grub are next the opening in the skin—if so, a few drops of oil applied to the spot would close their breathing holes, and kill them at once. Strong brine has been recommended.

In mild cases of garget, continued bathing in warm water has been found useful—when more severe, a hot local stimulant should be added, as red-pepper or alcohol—or a decoction of smart-weed or *Polygonum punctatum*. In very severe cases, (in which however we have had no experience,) bleeding and physic is recommended, in connexion with light food and cooling drinks. An ounce of salt-petre, or two ounces in severe cases, has also been recommended. For further information as to the above inquiries, we must refer to such of our correspondents as may be able to furnish it.

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Information Wanted.

How to Preserve Manure.—Much has been said and written on the subject of manure cellars, and the manufacture of manure, yet we are ignorant how to preserve it; as the farmer can only manure his land at certain periods of the year, can you or any of your numerous correspondents give information how to preserve manure For instance, I clean out my manure cellar, about the middle of September. I have heretofore found that from that time until the weather becomes too cold, the manure accumulated by the daily cleanings of the stables, mixing horse and cattle manure as it is thrown into the cellar, using nothing but wheat and rye straw for litter, will in six or eight weeks become fit for use, but as that time will be an improper one for hauling manure on land, how can I preserve it until the middle of April, without diminishing in quantity or quality. Or, I have just cleaned out my manure cellar, and from experience I know that the manure treated as above described, will, during summer, in about four weeks, sufficiently rot, to be used, but as I cannot manure any land before the middle of August, how shall I treat my manure that I may have by that time, the greatest quantity and the best quality on hand. K.

Stall-watering Cattle.—Will you or some of your correspondents inform me of the best method of watering cattle in their stalls by running stream? O. L.

Water in Cattle Yards.—The old system of allowing cattle to run at large during the winter, in search of water, is not to be thought of in comparison with the convenience and economy of a supply of pure water in the enclosures where stock is fed. Less food would be required by the animals, and the saving in manure alone would soon pay for the necessary outlay. Mr. S. M. Dorr, of Ghent, N. Y., wishes to ascertain some means of obviating the following difficulty. In conveying water from a running stream by a lead pipe of half an inch calibre, some forty rods to a cattle yard, whenever the stream is muddy from rain, the mud is forced through the copper strainer into the pipe, completely stopping the passage of the water. When this occurs in winter there is danger of the freezing of the water. A forcing pump has been used to clear the pipe. How can this be prevented?

Insect on Currant Bushes.—Three years ago, our *currant bushes* were attacked by a small bright green caterpillar, from ½ to ¾ of an inch in length; which devours every leaf; and if it does not kill, greatly weakens the bush. At first it was only on a few old trees, which from the great abundance of fruit we always had, we thought little of; but now they have increased so much, that last year we had not a gallon of fruit to eat. The only remedy I know of is hand picking, which is very tedious; can you tell me of a more expeditious plan? I have tried *tobacco, plaster, and lime*, without its having any sensible effect. J. W. Lemoine. *Kingston, Canada West, April* 24, 1852.

Pump Logs.—I would inquire when is the best time to fell pine timber for pump logs? I use logs in preference to pipe, as the water in this vicinity is hard, and the pipe gets stopped with slime. A. B. Abel. *Glenn, N. Y., April* 17, 1852.

Management of Bees.—I want information as to the keeping and management of bees. Do you know of any plan for feeding bees, so as to make them produce more honey than by the old way of gathering it from flowers? I noticed in the January number of the present volume, a long article by some one, saying how nice it could be put up in boxes by the bees themselves, and scented to suit one's taste. Are you knowing to any compound that will make better honey than that which is made from flowers? Please give us some instructions as to the constructing of a cheap bee house. I want all the instruction necessary for a new beginner. Can they be kept in a house all together and not swarm at all? If so, please give us a plan. A Youth. *Utica, April* 15, 1852.

Should Tin Roofs be Painted.—It is said, that if tin roofs are painted, they will not last so long as if left bright. If some of your readers can answer the question by having experienced it, it will be a favor to the public. D. Tomlinson. *Schenectady, June* 7, 1851.

Eds. Cultivator—Inclosed I send you a specimen of grass that grows in small quantities in our door-yard. I should like to know the name of it, and whether it is a good kind for hay. The seed was brought here by my grandfather from Virginia, some 40 years ago. Please tell me where I can get the seed and the price per bushel. H. B. H. *Bristolville, Ohio, June* 8, 1852.

The grass enclosed with the above, is the orchard grass, *Dactylis glomerata*, which is generally considered better for pasturage than mowing. We shall be glad to receive the opinion of its value, from any of our readers who have grown it.

Rhubarb.—Will some of your readers be kind enough to inform me through the columns of your periodical, if the report is true that I have heard, of the *leaves* of the Rhubarb or Pie plant of our gardens, being poisonous, and much oblige a subscriber. J. C. C. *Rahway, May* 15, 1852.

NEW PUBLICATIONS.

The Transactions of the Royal Hawaiian Ag. Society, at its first annual meeting in August, 1851—Vol. I, No. 2. Honolulu: Printed at the Government Press, by Henry M. Whitney.

We are indebted to our esteemed correspondent at the Sandwich Islands, W. Chamberlain, Esq., for a copy of the above work. It is a handsomely printed pamphlet of 126 pages, and contains, besides the annual address of the Hon. Luther Severance, all the usual reports made at our Cattle Shows, together with a variety of papers relating to the rural economy of the Island—the whole in a style which would, in every respect, be creditable to the best agricultural societies of our country. We shall be greatly obliged to our correspondent for the first number, which we have never seen.

The Pests of the Farm, with instructions for their extirpation. By H. D. Richardson. C. M. Saxton: New-York.

This is another of the series of Saxton's rural hand books, and will be eagerly sought after by those who have had their crops destroyed by four-footed beasts, fowls, and creeping things. It is neatly printed and for sale at 25 cents.

The Farmer's Cyclopedia of Modern Agriculture. By Rev. John L. Blake, D. D. C. M. Saxton: New-York.

This volume is designed to be a book for family reference, containing information on topics relating to rural life and domestic economy. The work is peculiarly valuable from the fact that it will aid the farmer in understanding the terms used in scientific agriculture. The definitions and explanations of words and phrases, are carefully and fully given, and as a whole constitutes an excellent household authority. Price, $1,50.

Graham's American Monthly Magazine. Published at $3 a year. By Geo. R. Graham: Philadelphia.

It really does one good to look at the illustrations and execution of this magazine. The June number is decidedly in advance of any previous issue. As an ornament to the parlor table, this magazine is well designed, and its matter is various enough to suit the tastes of all classes. We are glad to observe that the insipid flashy articles, which formerly burdened this class of monthlies, are giving place to more solid and substantial reading. It is evidence that the taste of the community is improving.

Grecian Antiquities. By Charles Anthon, L L. D. Harper & Brothers: New-York.

A full description of the geography of ancient Greece, with the manners, customs, and institutions of its several states, are given in this volume, in a style corresponding with Prof. Anthon's well known works. Though more particularly designed for the student, it will interest the general reader; for the research of years has failed to divest Grecian literature of its charm or dispel the strange fascination which their orators and poets, their festivals and games, their government and religion, have for the modern mind.

Harrison's Latin Grammar. Harper & Brothers: New-York.

This work is a profound exposition of the laws of the Latin language, suited to the more advanced student. It evinces deep and careful research, and great familiarity with the ancient classics. The author aims to reduce, as far as possible, the rules of Syntax to fixed and general principles, and to make the study of grammar rational, logical and philosophical. It is a valuable addition to works on philology.

NOTES FOR THE MONTH.

Acknowledgments.—Communications have been received, during the past month, from J. C., J., J. T. Andrews, Henry Hitchcock, T. B. Arden, C. H. Powell, Farmer's Wife, T. L. Hart, A. M. K., Ambrose Stevens, D. Tomlinson, S. Clark, Jr., S. W. Johnson, Gurdon Evans, L. V. W.

Books, Pamphlets, &c., have been received as follows:—Proceedings of Clinton Co. Ag. Society, from Willets Keese.——Constitution, Premium List, &c. of the Lenawee (Mich.) Ag. Society, from T. M. Cooley, Sec'y.——Seed of the "New Evergreen Sweet Corn," from Thomas Hancock, Burlington, N. J.——Premium List, Constitution, &c. of the Putnam Co. Ag. Society, from H. C. Wilson, Esq. Sec'y.

Insect on the Plum.—An esteemed correspondent at Springfield, Otsego co., has sent us a specimen of an insect and of a portion of the bark of a plum tree, containing a deposit of its eggs. The eggs are in compactly filled rows, beneath a single slit through the epidermis. The insect was lost, and we cannot speak of its character. This cannot be the cause of the black knot, as suggested by our correspondent, as in numerous cases, the most rigid microscopic examination of the black knot, has failed to reveal any indications of external or local injury—besides which we have often observed deposits of eggs, not dissimilar, but larger, both in the plum and cherry, that produced no effect whatever, except small mechanical injury. Indeed it is rare that insects produce any other result. We hope our correspoddent will favor us with the results of future observations.

Correction.—In our May number, page 183, we published, from the Family Visitor, an analysis of the strawberry, by B. Kirtland—and in our April number, p. 132. an analysis of the Sweet Potato, from the same source. It appears that there was an error in both of these analyses, which is thus corrected by Mr. Kirtland—"I noticed an error of importance in the publication of my analysis of the Strawberry and Sweet Potato, in your paper. In the analysis of the strawberry, where it reads Perphosphate of Lime, it should read Lime only; and in the analysis of the Sweet Potato, where it reads Phosphate of Lime, of Magnesia, of Potash—it should read only Lime, Magnesia, Potash. Where it reads Sand and Silica, it should read Silica only.

National Ag. Convention.—We received, after our last number had gone to press, a circular, calling a National Agricultural Convention at Washington city, on the 24th of June, signed by the several presidents of the different State Ag. Societies of the Union. As this number goes to press before the convention is organised, we can only now state the objects for which it is called, which are stated in the circular to be as follows:

"To organize a National Agricultural Society, to which the various agricultural societies may be auxiliary; to consult together upon the general good, and to establish, by this society, or such other means as the convention may devise, a more cordial and widely extended intercourse betwen agriculturists in our own country and in other lands; to create additional facilities for the acquisition and diffusion of knowledge, by books, journals, seeds and other objects of interest to the American farmer and gardener; and to act on such other matters pertaining to the advancement of agriculture as the wisdom of the convention may judge appropriate."

Cherry Trees at Midsummer.—Many young cherry trees have been set out the past spring, and have already commenced growth. But if left with hard exposed soil about them, a large portion will die before the close of summer, or during the hot, dry weather. If watered, as the work is usually done, the surface will become hardened and crusted, the roots not reached, and some trees killed by the very process intended to save them. An acquaintance, who set out 50 cherry trees a few years since, informed us that he watered about a third, every one of which died—most of the others lived. If it becomes necessary to apply water, the earth should be removed down to the roots, and replaced when the water is poured in. But it is far better to *keep* the ground constantly and moderately moist, than to flood it after it becomes dry. This is completely effected by mulching. Spread round the young cherry trees early in summer, old straw, spoiled hay, mown weeds, or any similar material, to a depth of six compact inches, and a few feet in diameter, and they will flourish and grow through the whole season.

Mr. Morris' Sale.—Since the page of this number, containing the account of this sale, was stereotyped, we have received from Mr. Morris a more full and detailed account, from which it appears that

7	Short-horn cows averaged,	$81 28	$590
2	do heifers,	82 50	165
4	do heifer calves,	87 50	350
1	do bull,		180
7	do bull calves,	105 00	735
1	do bull rented,		200
1	Devon heifer and 3 calves,	53 75	215
19	Ayrshires,	64 07	1,217 50
38	Pigs, Suffolk and Essex,	11 56½	639 50
11	South-Down Sheep,	14 22	156 50
3	do rams, rented for one season,		112 50
	Total,		$4,561 00

Heavy Cattle.—W. H. Worrall of Poughkeepsie, informs us that he has two five-year-olds, one a steer and the other a heifer, "which their numerous visitors have named Kossuth and Jenny Lind," whose live weight is upwards of 3,000 lbs. each. "If any one in the world," says Mr. W., "will produce as fine a heifer, of the same age and size of bone, I will bind myself to pay $1,000 for her on delivery."

McCormick's Reaper.—A good deal of interest has been excited by the application of Mr. McCormick to Congress, for a renewal of his patent of 1834, and the report of a bill in the U. S. Senate, in his favor, which, it is said, "covers every other grain reaper not only, but every mowing machine in use—a most monstrous claim," says one of our correspondents, "which, if successful, will render not only the manufacturers of these implements, but the whole farming community tributary to him." We have not seen the bill alluded to, and know nothing of the merits of the case, further than what is stated in the remonstrances sent us. Congress will, we doubt not, be careful, in doing justice to Mr. McCormick, not to do injustice to other inventors, or the manufacturing or farming interest.

North Carolina.—We are indebted to Jas. Sloan, Esq., of Greensboro, for a copy of the proceedings of a meeting held at Guilford County Court House, in February last, at which an Ag. Society for the county was organised, constitution and bye-laws adopted, officers elected, and an able and appropriate address delivered by Ralph Gorrell, Esq. Wilson S. Hill is President of the Society, and James Sloan, Cor. Sec'y.

Re-topping young Apple Trees.—A good many cultivators set out seedling apple trees, in order to do their own grafting. Generally, it is better to buy at once good grafted trees. Others wish to change the tops of worthless sorts which have been before grafted. Both lose two or three years by the cutting-back which it is usually necessary to give them before setting the grafts. An easier way, with scarcely any loss of time, is to change the tops by *budding*. Trees seven or eight feet high, with heads, may receive six or eight buds, distributed evenly throughout, and older trees, (not over two or three inches in diameter,) a proportionately larger number. The next spring, the shoots are cut back to be buds, (instead of lopping heavy limbs as in grafting,) and the original form and nearly the original size of the head retained. The buds should be set soon after midsummer.

Fruit Drying House.—A correspondent of the Michigan Farmer has constructed a fruit-drying house, which he says "has succeeded beyond his expectations." It is 12 feet square, with eight feet posts, lathed and plastered, with an air-tight sheet-iron stove in the center. The screens, 24 in number, are two feet by five, and are arranged about nine inches one above another, on two sides of the apartment. The fruit dries twice as fast above as below. Three days is the usual time required. Fruit thus dried, it is asserted, is of much finer quality than any dried in the open air. The whole cost was $45. Ventilation is not mentioned, but we presume it is amply secured, as it is indispensible to the escape of the hot moist air, which would otherwise cause speedy rotting.

Flat Turneps on Heavy Soils.—Many are aware of the difficulty in attempting to raise a crop of flat turneps on a heavy or clayey soil. We have known complete success to result from the following practice: Spread over the piece of ground intended for the turneps, several inches or a foot of old straw, fine brush, and whatever else of a similar combustible character may be at hand—burn these, and sow the turneps without disturbing the soil much—a good crop will be the result. Whether the coat of fresh ashes—the slight burning which the clay receives—the destruction of insects and their eggs—or the repulsive effect to the turnep fly,—has the greatest favorable influence, or whether all operate together, we must leave for others to decide—we only know the result.

Drying Tomatoes.—The Ohio Cultivator says, (early last summer,) "We ate some very fine tomatoes not long since, dried in the following manner. Fruit fully ripe, was scalded, strained through a seive, slowly cooked half an hour, spread on clean plates, and dried in an oven, the whole process requiring about two days before the fruit was ready to pack away."

Kossuth.—At the Annual Meeting of the State Agricultural Society, a resolution was adopted instructing the Executive Committee to present to Gov. Kossuth the Medal and Transactions of the Society, as an humble token of the appreciation of the Society of his patriotic and republican principles, and of their desire that his country may be permitted to enjoy the same privileges guarantied to us by our free institutions.

The President and Secretary of the Society called upon Gov. Kossuth on his arrival in the city, to ascertain his pleasure in relation to the presentation, as designed by the Society, and were informed that it would give him great pleasure, on his return from Niagara Falls, to meet them at the Society's rooms, which he much desired to visit, and examine the collection of implements, seeds, &c., which he had been informed the Society had collected and arranged.

On Saturday, the 5th of June, Gov. Kossuth, and Mrs. Kossuth, Col. Pulzky, and Mrs. Pulzky, Capt. Kalapsza and Capt. Frechench, were introduced by Mayor Perry to the officers and members of the Society present at their rooms.

Mr. Johnson, Secretary of the Society, in the absence of the President, Mr. Wager, who was unexpectedly called from the city, addressed Gov. Kossuth on presenting him the gold Medal and Transactions of the Society. He remarked that, as the representative of the Society, it gave him great pleasure in being permitted to present him the gold medal of the Society and a complete set of its Transactions; and he indulged the hope that Hungary might soon be in the enjoyment of those privileges guarantied to us by our free institutions.

Gov. Kossuth made a brief, and, as always the case with him, most appropriate reply, and returned his most cordial thanks to the society and to its members present, for the gratifying occasion which had so unexpectedly been presented, to speak of his country in that relation which was dear to his heart.

The Governor and his attendants spent nearly two hours in the examination of the museum—and made particular inquiries in relation to the implements, seeds, &c., which were shown by the secretary of the society.

Agricultural Journals.—*The Green Mountain Culturist*, is the title of a new dollar monthly, just commenced at Middlebury, Vt., by D. R. Bassett & Co. The first number affords promise of an excellent work.

The Wool-Grower, heretofore published at Buffalo, by T. C. Peters, has been transferred to D. D. T. Moore, editor Rural New-Yorker, by whom it will hereafter be published, at Rochester. This arrangement will add materially to the interest and value of the work, as besides the continued labors of Mr. Peters, it will have the benefits of the experience and energy of Mr. Moore. Terms, 50 cents.

The New Era, is the title of a weekly journal recently started at Goldsboro', N. C., by Robinson, Murphy & Co., a considerable portion of which is devoted, in a most efficient manner, to the cause of Agricultural improvement.

Good character is above all things else.
Never listen to loose or idle conversation.
Have no very intimate friends.

Virginia Land for Sale.

A NUMBER of tracts lying in the counties around Lynchburg, and varying from one hundred to two thousand acres,—these lands contain a fine close red subsoil and can be brought to any state of fertility the cultivator may wish. Prices from $3 to $15 per acre. Very near town and more distant, several large tracts of mountain land at prices from 50 cents to $2 per acre. BENJ. WILKES,
Lynchburg, July 1, 1852—1t.* Land Agent.

Bickford and Huffman's Celebrated Grain Drill.

THIS excellent machine has been greatly improved, and double the usual number has been sold during the past year, without supplying the demand; and in *all cases* they have given perfect satisfaction. ☞ *Of the great number sold, not one has been returned*, although each is warranted to sow all kinds of grain with accuracy, to suit the purchaser, and to be made in a workmanlike manner.

Several years experience, and increased facilities for their manufacture, enables us to offer them with confidence as the best grain drill in use. The grain is distributed with great accuracy and precision, and in any desired quantity, by means of different sized gear-wheels. We manufacture them with drill tubes, either in single or double rows, to suit purchasers—when in double rows, the front row is several inches forward of the back row, (sowing the grain in rows seven inches apart,) facilitating the passage of the tubes among stones and clods. We will make them to order, if desired, with tubes at any required distance apart.

Purchasers ordering Drills will please state distinctly the kind they prefer. Orders will be promptly attended to, and should be sent early, directed either to "*Bickford & Huffman, Macedon, Wayne Co. N. Y.*," or to

Daniel Supplee, Dundee, N. Y.
Alfred Hale, Alloway. do
H. W. Levanway, Lock Berlin, N. Y.
C. L. Marsh, Sparta, N. Y.
Amos Willetts, Aurora, N. Y.
John King, Genoa, do
John C. Hall, Farmersville, N.Y.
McLallen & Hazler, Trumansburgh, N. Y.
Col. J. M. Sherwood, Auburn, N. Y.
Waterman & Jackson, Vienna, N. Y.
David Vervalin, Poughkeepsie, N. Y.
James H. Glass, Geneseo. N. Y.
J. H. Butterfield, Utica, Mich.
B. B. Dexter, Batavia, Ill.
Abner Wing, Geneva, Wis.

PRICES OF DRILLS.—For 7 tube drills, $65; 9 tube drills, $75, delivered at canal or railway. July 1—1t.

The Saturday Evening Post.

THE CURSE OF CLIFTON: A TALE OF EXPIATION AND REDEMPTION, by Mrs. E. D. E. N. Southworth, author of "The Deserted Wife," "Shannondale," "The Discarded Daughter," &c.

Such is the title of a new novelette about being commenced in the Saturday Evening Post, of Philadelphia, by that gifted writer Mrs. Southworth.

Single subscriptions $2 a year—4 copies $5—9 copies $10—21 copies $20. Specimen copies sent gratis. Address post-paid,
DEACON & PETERSON,
July 1—1t. No. 66 South Third st., Philadelphia.

New and Important Insurance.

Northern N. York Live Stock Ins. Co., Plattsburgh, N. Y.

INCORPORATED by the Legislature of the State of New-York, July, 1851. Horses, Cattle, and all kinds of Live Stock insured against Death, by the combined risks of Fire, Water, Accidents, Diseases, &c. CAPITAL, $50,000.
GEORGE MOORE, Plattsburgh, Sec'y.
I. C. Mix, Fort Ann, Gen. Agent.
October 13, 1851.

This company are now organized and ready to receive applications for insurance. It is confidently believed that the owners of valuable animals will avail themselves of the advantages offered by this mode of protection. If fire, life and marine insurances are proper and expedient, so is live stock insurance: the reasons for insurance are equally applicable to all.

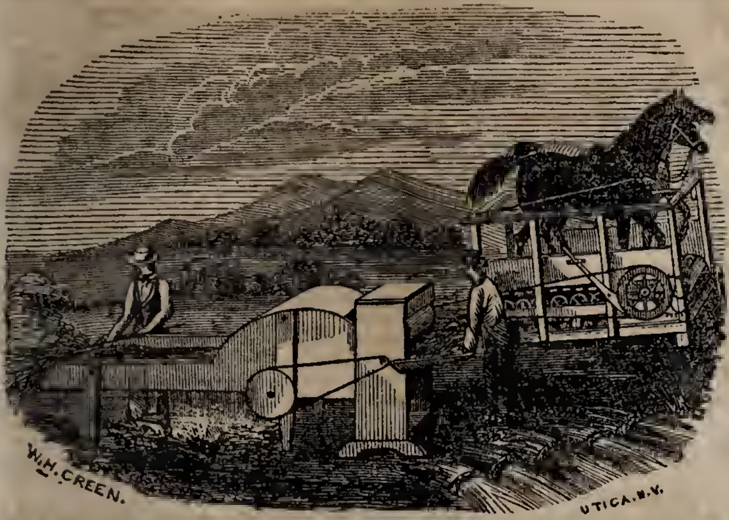
For terms please apply to Company's Agents.
Plattsburgh, July 1—tf.

$1,000 Challenge.

I OFFER to place *one thousand dollars, cash*, into the hands of a party chosen, against *one thousand, to be paid* into the hands of the same party, by any manufacturer of threshers in the United States, if a machine can be found that will thresh and clean, fit for market, or seed, with the aid of *only two horses*, 100 bushels of wheat and rye, in less time than I can with my "Excelsior Wrought Iron Cylindrical Thresher and Cleaner." The grain to be thoroughly threshed, without white caps, or broken, and the straw delivered long enough to stack, and free from chaff. The winner to receive the $2,000 with both machines and power.

For circulars address Joseph G. Gilbert, 216 Pearl street, New-York.

Emery & Co's advertisement in April number, with plates, termed by them "Emery's Improved Patent Rack and Pinion Power," I believe to be a direct infringement on "Urmy's Patent," and as Attorney for Mr. Urmy, I warn all who make or purchase a machine infringing on such patent, that they will be dealt with according to law. These powers can be procured from me only, at less prices than any other good railway power.
July 1—1t.


W.H. CREEN.
UTICA. N.Y.

BADGER'S PATENT HORSE POWERS,

Uundershot Threshers and Separators, Circular AND CROSS CUT SAWS &c.

MANUFACTURED at FLY CREEK, Otsego Co., N. Y., by E. W. BADGER, and for sale, at Wholesale and Retail, at prices that cannot fail to please.

The attention of Farmers is especially called to the simple Mechanical arrangement of the above Machine. It contains only about one-third as many wheels or rollers, (as most others now manufactured,) and those turn slowly, on small cast steel bearings, creating but little friction, consequently more power and durability. The revolving platform is so constructed that any farmer with his own tools, can take off and replace the woods when worn out, without the assistance of a practical mechanic.

The best evidence of the value and superiority of the above Machines, the Manufacturer can offer, is, that his establishment has been in constant and successful operation the past eight years, and there has never been a single machine returned or condemned, and there are hundreds that will testify to their value and usefulness. The Undershot Thresher, it is acknowledged, has no equal. and taken in connection with the most simple and efficient grain separator that has ever been invented, does not require more power than the common Overshot Threshers alone. The Circular Saw Mill has given universal satisfaction, being in use on most of the Railroads in the country, where constant service requires strength and durability. Every Machine is warranted, and we fear no competition in Threshing and separating any kind of grain, or sawing wood.

Fly Creek, Otsego Co., N. Y., June 1, 1852—1t.

Green-House Glazing.

THE undersigned having had considerable experience in glazing sashes, now offer their services to the public; work done either by the day or by the job, and warranted to give satisfaction. The most satisfactory reference can be given as to workmanship, &c. Address, BLAKESLEE & BAILEY,
July 1—1t. Waterbury, Connecticut.

LOOK HERE.

FOR SALE, a comfortable and healthy home, a farm of 251 acres in Loudon co., Virginia. Price $3,000. One hundred and fifty acres cleared, in five fields. Good grass and wheat land. Six miles from Mannassa and Alexandria Railroad, 28 from latter place. The Timber and Tan-bark alone is worth the price asked. For further particulars address, (post-paid,) Dr. WILLIAM LANPHIER, Alexandria, Virginia. July 1—1t.*

A Small Farm for Sale.

THE subscriber, having business which calls him elsewhere, will sell on reasonable terms, the homestead occupied by him, situated in the town of Schodack, Rensselaer Co., a short distance from the Hudson River and Hudson River Railroad.

The farm consists of 28 acres of land, under good improvement, with choice fruit of various kinds—flower garden, &c., tastefully laid out. The dwelling is of brick, 30 by 32 feet, with two parlors, dining rooms, bed rooms, pantries and clothes presses in abundance, together with brick kitchen and wood-house—with two large brick cisterns, for domestic and barn purposes, besides a well of pure water. Also, barn, corn-house, stable, cow-house, henery, piggery, &c., &c. An examination of the premises will satisfy any man that it is second to none in the town. The terms of sale will be one half down—the other half may remain for a term of years. For particulars address the subscriber, at Castleton, Rens. Co., N. Y.

July 1—1t.* L. G. HOFFMAN.

Morgan Horses.

Waterbury, Vt., June 5, 1852.

L. TUCKER—Sir: We are so often receiving letters making inquiries respecting the Gifford Morgan stock, whether we have any on hand, &c., that I shall esteem it a privilege to answer through the Cultivator, as that circulates so widely, it will answer many at the same time. Yours, C. & C. H. BLODGETT.

DEAR SIR—We have six colts by old Gifford Morgan,—four Stallions, viz: one four years old this season, one three years, one two years, and one yearling. The oldest two are chestnut color, the two younger are mahogany bay. The dam of the first by old Woodbury Morgan—the dam of the second by the General Hibbard—the third and fourth, from our Miss Floyd, a colt of Green Mountain Morgan, and a Messenger mare, and she is also the dam of Ackly and Gilbert's Morgan Chief, now five years old, of East Hamilton, N. Y. We have two filleys, viz: Clara Fisher, four years old next August, which we last season sent, with Miss Floyd, to the celebrated "Black Hawk Morgan," and we hope, from so fine a cross, to get some good stock. The other filly, Lady Gale, is two years old, from the dam of the pacing gelding "Hero." sold by us a year ago, and now owned by McMann of New-York city, making time in 2.14. The oldest filly sorrel, the youngest dapple chestnut. We also have one bay two year old filly, by Major Gifford, owned by Mr. Mason, of Penn Yan, N. Y.

These seven colts are all very fine, promising to do honor to the noble race of Morgan horses, but we will describe definitely, the four year old Stallion only. He is 14 hands high, short back, long hip, broad across the loin, well spread stifle,—low close jointed—flat, broad, clean, sinewy limbs. Up well forward, with fine intelligent countenance and small ears, a chestnut color, with no white. A short sharp gait, and in all respects as closely resembling the old Gifford, as any colt that can be produced. Will make a good ten hundred horse for size and value. Truly yours,

C. & C. H. BLODGETT.

To P. C. Johnson, Esq., of Cincinnati, Ohio. July 1—1t.*

EMERY & CO.'S Horse Powers and Threshers, for sale at Manufacturer's Prices, by RALPH & CO., 23 Fulton Street, New-York. May 1—3t.

WHEELER'S Horse Powers, Threshers and Separators, for sale at Manufacturer's Prices, at the Union Agricultural Warehouse and Seedstore, 23 Fulton Street, near Fulton Market, New-York. May 1—3t.

SUBSOIL PLOWS, recently improved by Prof. J. J. Mapes, together with an assortment of the most approved Plows for Sward, Stubble, and New Land—also Side Hill and Double Mould-board Plows, Cultivators, Harrows, &c., for sale at the Union Agricultural Ware House and Seed Store, RALPH & CO., 23 Fulton
May 1—3t. Street, New-York, near Fulton Market.

FAN MILLS, Grain Cradles, Scythes, Field and Garden Rollers. Horse Rakes, Seed Sowers, Road Scrapers, Straw Cutters, with an assortment of Agricultural Implements, and Horticultural tools. For sale by RALPH & CO.,
May 1—3t. No. 23 Fulton street, New-York.

STOVES.

THE subscribers are prepared to furnish dealers with a full assortment of PARLOR and COOKING STOVES for coal and wood, on liberal terms.

Circulars giving particulars can be had on application.

JAGGER, TREADWELL & PERRY,
Eagle Foundry, No. 110 Beaver st., Albany, N. Y.
May 1, 1852—6t.

WATER WHEELS.

THE subscribers are making with success, Jagger's improved FRENCH TURBINE WATER WHEEL.

Tables showing the power and capacity of the same can be had on application. JAGGER, TREADWELL & PERRY,
Eagle Foundry and Machine Shop,
May 1, 1852—6t. No. 110 Beaver st., Albany, N. Y.

PERUVIAN GUANO

AND other Fertilizers. Several hundred tons of first quality of Peruvian Guano, constantly on hand for sale.

Also, BONE DUST, PLASTER OF PARIS and POUDRETTE.

A. B. ALLEN & CO., 189 and 191,
Water-st., New-York.
Jan. 1—tf.

Kinderhook Wool Depot.

THE subscribers continue the business of receiving and selling wool on commission. Several years experience, an extended acquaintance with Manufacturers, and increased facilities for storing and making advances on wool, will enable them, it is believed, to give satisfaction to those who may favor them with consignments.

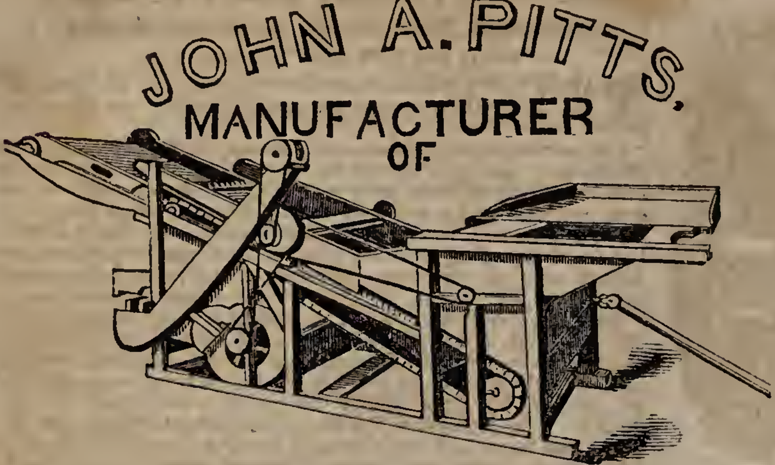
All who desire it, can have their clips kept separate.

Their charges for receiving, sorting, and selling, will be ONE AND A HALF CENTS PER POUND, and insurance at the rate of 25 cents on $100 worth of wool for each term of three months and under.

Kinderkook, June 1, 1852—3t. H. BLANCHARD & CO.

Clarke's Elcelsior Churn,

OF various forms and sizes, will be furnished to dairymen, throughout the United States, at prices ranging from $2 50 to $10. The sizes generally preferred, with iron axles, crank and gearing, will be delivered at Utica, for Canal or Railroad, at $7.00 and $10 each. No extra charge is made for the perfect tempering apparatus which goes with every Excelsior Churn. Three or more thirty gallon milk churns in one frame, for horse power, is offered at about $5 per cylinder. Orders from distant places should enclose payment. Agents wanted to sell state and county rights. Circulars giving full information, terms to agents, &c, will be sent gratuitously to all who apply at any time post-paid, to the proprietor. GEO B. CLARKE,
June 1, 1852—2t.* Leonardsville, Madison Co., N. Y



PITTS' PATENT SEPARATOR
AND
DOUBLE PINION HORSE POWER.

OWING to the increased demand, and being desirous of locating at a convenient point for shipping, I have removed to Buffalo, N. Y., and have erected a large establishment for the purpose of manufacturing the above celebrated Machines, for threshing and cleaning grain at one operation.

This is the same Machine that has stood, and now stands, unsurpassed by any Machine in existence for the above purpose. It has been exhibited at nearly all the State and County Agricultural Fairs throughout the United States, and always received the *first premium.*

The Machine has recently been much improved, enlarged, and rendered more substantial in all its parts. I therefore offer it to Farmers of the different wheat growing districts, to be all I claim for it, viz: *the best Machine* for threshing and cleaning grain, now in existence.

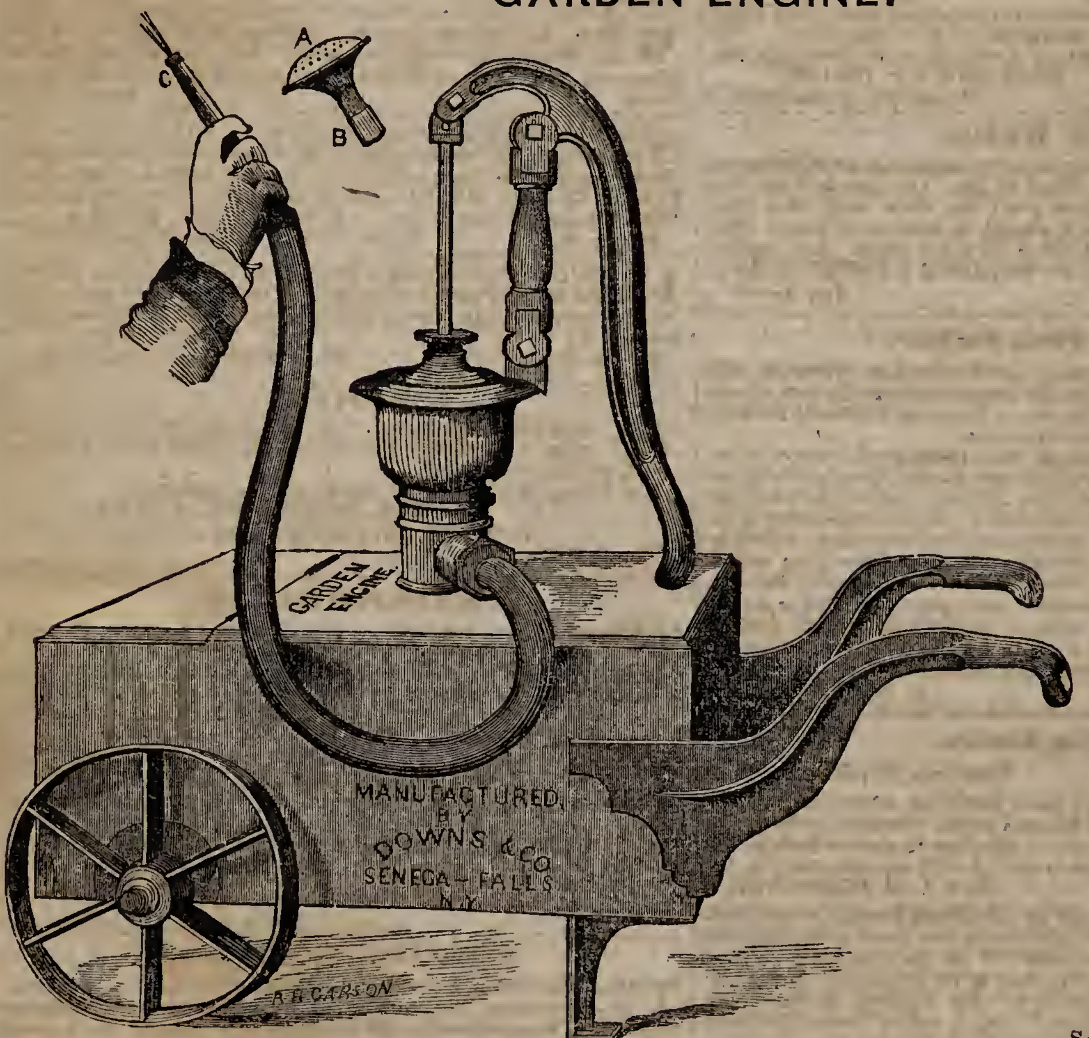
I also manufacture Pitt's Improved Endless Chain Two Horse Power and Separator—also Pitt's Corn and Cob Mill, for grinding feed for stock.

My Horse Powers and Separators are all warranted to be a better article than can be purchased at any other shop—and if they do not, on trial, prove to be so, I will take them off the hands of the purchasers at the price they may pay me for them.

P. S.—The Patent Right on the Separator has recently been extended for a further term of seven years, and all *infringements* on *said right* will be dealt with according to law. JOHN A. PITTS.

Buffalo, N. Y., July 1, 1852—tf.

GARDEN ENGINE.


A
B
C
GARDEN ENGINE
MANUFACTURED BY DOWNS & CO SENECA-FALLS N.Y.
R.H. CARSON

THIS cut represents a Garden Engine, devised and manufactured by us, which we feel justified in commending to the Trade and public, as a very neat combination of usefulness and convenience.

It can be moved and managed by one man for all the purposes of its intention, as easily as a wheel barrow, and will be found highly useful in not only supplying Gardens, and Nurseries with regular showers in times of drouth, but also for showering trees and plants, and for the destruction of worms, which may be made effectual by an admixture of *Sulphur with the water.*

For washing Side-walks also, and Windows, and for the extinguishment of Fires, it presents additional claims; and rightly considered, may be regarded as a most indispensable article of usefulness and security.

The box will contain about 50 gallons of water, is placed on Cast Iron Wheels, with handles, as represented in the Cut, and the Pump will throw water about 70 feet, in a horizontal direction, and 40 feet high.

C, the end of the spout on the hose, has a thread, upon which the sprinkler *A*, is secured at the extremity *B*, when used for showering; and the whole we have no hesitation in commending as a truly useful and successful arrangement.

Orders respectfully solicited.

DOWNS & CO.

Seneca Falls, N. Y., 1852—1t.

☞ We also make a great variety of Force and Suction Pumps, which dealers are invited to examine—and upon their application will send Circulars.

Kell's Improved Horse Powers and Threshers.

WHITE & PRENTISS, successors to Philip H. Kells, would respectfully inform the public that they are now manufacturing Horse Powers, Thrashing Machines, &c., with the valuable improvements made by Philip H. Kells, and solicit the call of such as wish to purchase single or double RAILWAY HORSE POWERS, SEPARATORS, OVER OR UNDER SHOT THRASHING MACHINES, of the latest and most approved construction, and of the best workmanship and materials. From their enlarged and improved facilities for carrying on the business the subscribers are confident they can supply customers with as good work, and on as liberal terms, for cash, as any other establishment in this state.

Orders from any part of this or other states, will be immediately attended to, and promptly supplied. Hudson, June 1, 1852—3t.*

THE Tranasctions of the New-York State Agricultural Society, vols. 1 to 9, for sale at the Office of "THE CULTIVATOR," price $1 per vol.

A First Class Dairy Farm for Sale.

MY farm of 320 acres, four miles south of the village of Oxford, Chenango county, N. Y., and near the Chenango Canal. 250 acres are under high cultivation, durably fenced, and well and permanently watered. The remainder is well timbered. It has a large two story mansion, five large barns, and sheds and out houses, in good repair. The soil is deep and of superior quality. It is admirably adapted for a dairy, or for grazing and grain; has a fine orchard of choice grafted fruit; and for profit, health, and beauty of location, cannot be surpassed. It is fully supplied with farming tools, and about fifty head of cows and young stock, all or any of which may be had with the farm. The New-York and Eric Railroad furnishes ample facilities for forwarding produce to the New-York market at all seasons, and the route of the contemplated Albany and Binghampton railway, passes within a few miles of the farm. The farm can be conveniently divided. Price low—title perfect. Terms most easy.

G. VAN DER LYN,
Oxford, N. Y.

May 1, 1852—tf.

FIELD SEEDS.

AUSTRALIAN WHEAT.—Very superior. The berry of this grain is extra large, and makes the best of flour. It produces a greater average crop than any other variety now grown in New-York. Several years' experience in its cultivation, proves that it is less liable to rust or mildew than other kinds; and as the stalk is large and strong, it is also less liable to blow down or lodge. Price, $4 per bushel. Other varieties of wheat, such as the White Flint, Mediterranean, Black Sea, &c.

BUCKWHEAT, of the best kinds in market.

RUTA BAGA, or Sweedish Turnep Seed. The Purple Top and other superior varieties.

TURNEP SEED.—Large White Flat, Long White, Red Top Flat, Yellow Aberdeen, Yellow Stone, and other improved kinds for the field or garden A. B. ALLEN & CO.,

June 1, 1852—tf. 189 and 191 Water st., New-York.

Albany Tile Works.

Corner Patroon and Knox Streets, Albany.

THE subscriber will furnish to Agriculturists, of the most approved patterns, Drain Tile suitable for land drainage, of a superior quality, over one foot in length, 3 to 4½ inches calibre, from $12 to $18 per 1000 pieces. They are formed to admit the water at every joint, draining land from 12 to 20 feet each side of the drain, being the cheapest and most durable article used.

Tile sufficiently large for drains around dwellings, at $4 and $8 per 100 pieces, being cheaper and more durable than brick drains.

The great importance of thorough drainage is daily becoming more apparent. Orders from a distance will receive prompt attention.

March 1—6t A. S. BABCOCK, Albany.

Albany Drain Tile Works.

No 60 Lancaster Street—West of Medical College, Albany.

THE subseriber has now on hand, Draining Tile of the following descriptions. Prices reduced.

HORSE SHOE TILE.

5½ inch Rise, or 4½ inch Calibre,............ $18 00 pr. 1000.
4½ " " 3½ " .... 15 00 "
3½ " " 2¾ " .... 12 00 "

SOLE TILE.

4½ inch Rise, or 3½ inch Calibre,............ $18 00 pr. 1000.
3½ " " 2¾ " .... 12 00 "

These Tile are over one foot in length, and are so formed as to admit water at every joint, draining land from 12 to 20 feet each side of the drain—being the cheapest and most durable article used.

Tile sufficiently large for drains around dwellings, at $4 and $8 pr. 100 pieces. Orders from a distance will receive prompt attention.

Albany, April 1, 1852—tf. JOHN GOTT.

MORGAN HORSES.

ONE Black Hawk Horse six years old, and one of the Morgan and Messenger stock, four years old this spring, will stand the ensuing season (for a limited number of mares.) at the farm of Moses Lyman, two miles south-west from Goshen Village. They are both superior horses, possessing great bone and muscle. Their color, a beautiful black.

Breeders of horses are invited to call and judge for themselves.

SILAS BENEDICT, JR.

Goshen, Connecticut, June 1, 1852—2t.*

THE ORIGINAL BLACK HAWK.

THIS celebrated horse will stand this season at the stable of the subscriber, in Bridport, Addison County, Vermont.

To the Patrons of Black Hawk.—It is proposed by the owner, that the horse shall serve a limited number of mares for this season—and those who would like to secure the services of the horse, will please send to the agent their names, (by letter or otherwise,) as those sending first, will be first served.

Good keeping will be provided for mares from a distance—and all *accidents, escapes and thefts*, will be at the risk of the owner.

N. B—Terms for the use of said horse will be, for the *season*, $10, payable in cash or satisfactory notes, on demand, with interest; and all demands for *past services*, of *Black Hawk*, and *Post Boy Morgan*, must be immediately paid to David Hill, who is alone authorised to settle the same. D. EDGAR HILL, Agent.

Bridport, Addison Co., Vt., June 1, 1852—2t.

FOWLS AND EGGS.

THE great desire manifested in New-England for procuring good Poultry, has induced H. B. COFFIN, *Newton, Mass.*, to pay particular attention to breeding and importing first rate stock All persons desirous of having the purest and best to breed from, may depend upon being faithfully served. Among many kinds of Fowls for sale by him, are the following, which he is very particular in breeding.

Shanghae—Forbes stock.
Imperial Chinese—Marsh stock.
Chittagongs.
Royal Cochin China.
Black Shanghae.
Burmah Pootras.
White Shanghais.

Dealers in Fowls or Eggs for hatching, supplied upon liberal terms. Orders addressed to *No. 40 State Street, Boston*, will be promptly executed.

Reference to Mr. J. VAN DUSEN, of Cincinnati, Ohio, who wil take orders for Fowls, as advertised above.

Boston, Aug. 1, 1851—12t.

Improved Stock.

CATTLE, of the Durham, Devon, Hereford, Alderney, and Ayrshire breeds.

SHEEP, of the Native and French Merino, Saxony, South-Down, and Cotswold.

PIGS of the Lincoln, Suffolk, and Berkshire breeds.

From our long experience as breeders and dealers in the above kinds of stock, and our excellent situation for purchasing and shipping, we think we can do as good justice to orders, as any other house in the United States. A. B. ALLEN & CO.,

Jan. 1, 1852—tf. 189 and 191 Water st., New-York.

Great Sale of Short-horn Cattle in 1852.

THE subscriber, contemplating some important changes and improvements upon his farm, will sell, *without reserve*, his entire herd of thorough bred, and high grade Short-horn cattle, consisting of upwards of ONE HUNDRED head of Cows, Heifers, Bulls, and Bull and Heifer calves.

This valuable herd of cattle has been nearly all bred by the subscriber, on his farm, and under his own eye, with a particular view to their milking quality, which he believes he has been successful in developing to a degree not excelled in any herd of cows in the United States. Ever since the year 1831 he has been engaged in breeding Short-horns, in the belief that no cattle kept by the farmers of this country, were equal to them in all their qualities, as dairy and feeding animals, and this belief has been fully confirmed by seventeen years experience.

Commencing with animals selected from the best thorough-bred stocks, then to be found in this country, this herd has been continually added to, and improved by selections from the best imported stock, and their immediate descendants. During the years 1845, '46 and '47, the Short-horn blood of the late celebrated Thomas Bates, of Kirkleavington, England, was resorted to in the use of the imported bull, Duke of Wellington, and of Symmetry, (by Duke of Wellington, out of the imported Bates Cow, Duchess,) belonging to Mr. George Vail, of Troy, N. Y., which bulls were hired of Mr. Vail for three years. The animals of this herd, since grown up, inherit, more or less, of that blood, which is believed by those having opportunity to judge, both in its milking and feeding qualities, to be equal to any other previously imported; and that belief is confirmed by the prices obtained during several years past, for animals descended from that stock.

For the quality of the stock bred by the subscriber, he can, without vanity, refer to the recent Short-horn sales of Messrs. J. F. Sheafe and Lewis G. Morris, in which some of the highest priced animals were immediately descended, or purchased from this herd. The unrivalled cow, "Grace," owned by Messrs. Sherwood and Stevens, and probably the best *fat* cow ever bred in America, described in pages 183 and 184, vol. x., of the American Agriculturist, was bred by the subscriber; and numerous animals in various parts of the United States, the West Indies, and the Canadas, which have sprung from his herd in years past, may be referred to.

In 1850, the imported bull, Duke of Exeter, of the Princess tribe of Short-horns, (for pedigree of which see (10, 152,) vol. ix., of the English Herd Book,) sent out from England for Mr. Sheafe of New-York, by Mr. Stevens, from the distinguished herd of Mr. John Stephenson of Wolviston, England, was purchased and introduced into this herd; and about forty of the cows and heifers are now in calf to him, all of which will be catalogued for the coming sale. In the quality of his flesh, and in the milking excellence of his ancestry, no bull imported in the into the United States can surpass the Duke of Exeter. His own stock, in the hands of several gentlemen in the State of N. York, are confidently referred to as evidence of his value.

The herd now offered for sale for sale will consist of about FIFTY, thorough breds, including cows, heifers, and heifer calves; and probably TEN OR TWELVE young bulls, and bull calves. The remainder, about fifty in number, will comprise young cows—good, proved, milkers—heifers and heifer calves, together with a few superior bull calves, from the best milking cows, of high grade, Shorthorns, with an occasional dash of Devon blood intermixed—the best of useful, family cows.

All the calves, or nearly all, both thorough-bred and grade, will be the get of the Duke of Exeter; and all the cows, and two-year-old heifers will be bulled by him, (if he lives,) previous to the sale; thus will be combined the blood of the Bates, and the Stephenson stocks, comprising as much excellence, both in milk and flesh, as can be found in any animals whatever.

In addition to the stock above enumerated, will be eight thorough bred Herefords—three cows, one two-year-old bull, one yearling bull, and three calves. One of the cows, (Rarity,) was imported by Messrs. Corning and Sotham in 1841. The other cows and calves are her descendants by bulls of the same importation.

Also, two or three Devon bull calves, got by Mr. Ambrose Stevens' imported bull "Candy," bred by Mr. Quartly, of Devonshire, England, and out of cows descended from the herd of the late Earl of Leicester.

Also, two pairs of thorough-bred, six-year-old Short-horn oxen, and two or three pairs matched two and three year old steers.

Also, ten or twelve South Down buck lambs, got by an imported Ram from the celebrated flock of Jonas Webb, of Babraham. England, and out of Ewes descended from the flocks of Mr. Webb, and Mr. Ellman, of Sussex.

The sale will be on the 18th August, on the premises occupied by Peter Gurbrane, at the Homestead farm of Gen. Van Rensselaer, on the Troy Road, two miles above Albany, where the stock will be about ten days previous to the sale.

Catalogues will be ready by 15th June, and forwarded to all post-paid applicants.

For further particulars, inquiries may be made by letter, directed to the subscriber, or to A. B. ALLEN & CO., New-York.

June 1. LEWIS F. ALLEN, Black Rock, N. Y.

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United States Agricultural Warehouse and Seed Store.

No. 197 Water Street, New-York

THE subscribers solicit the attention of the public, to the large and varied assortment of Agricultural and Horticultural Implements, Field and Garden Seeds which they have constantly on hand, and offer for sale at the lowest prices, and on the best terms.

July 1—tf. JOHN MAYHER & CO.

Hussey's Reaping Machines,

FOR SALE at the United States Agricultural Warehouse and Seed Store, No. 197 Water street, New-York.

July 1—1t. JOHN MAYHER & CO.

Ketchum's Mowing Machines,

FOR SALE at the United States Agricultural Warehouse and Seed Store, No. 197 Water street, New-York.

July 1—1t. JOHN MAYHER & CO.

Horse Hay Rakes,

OF different styles made of wood, also a prime article with spring teeth, for sale at the United States Agricultural Warehouse and Seed Store, No. 197 Water street, New-York.

July 1—1t. JOHN MAYHER & CO.

McCormick's and Hussey's Reaping Machines,

BURR Stone Mills, sizes from 12 to 30 inches, Horse and Hand Rakes, Fanning Mills, and Grain Cradles. For sale, by

LONGETT & GRIFFING,
July 1—1t. 25 Cliff street, New-York.

Superphosphate of Lime,

FOR farming purposes, in quantities, to suit purchasers, price 2½ cents per pound. Analyses will be sent to those that desire it.

LONGETT & GRIFFING,
July 1—1t. 25 Cliff street, New-York.

EMERY & CO.'s

Improved Horse Power. Thrashers and Separators.

THE undersigned have been appointed sole agents for the sale of Emery's new patent Improved Horse Power, Thrashers and Separators in the city of New-York. The State Agricultural Warehouse is the only Depot where this superior power can be had. As many powers are represented as Emery's patent, to avoid impositions, be careful to observe that the name of Emery & Co , is cast in full on every link of chain and the wheel hub.

LONGETT & GRIFFING.
July 1—tf. 25 Cliff street, New-York.

Berkshire Pigs.

FOR sale, 10 Pigs, two months old, from my imported Boar and Sow, warranted pure—price ten dollars per pair. Also the above Boar, two years old, from some of the best stock in Berkshire—and noticed in the "American Agriculturist" for Feb. 1851. Price $25.

July 1—1t.* Address C. W. SIMMONS, 176½ Bowery, New-York.

Valuable Farm for Sale,

SITUATED in the town of Smyrna, Chenango county, two miles north of the village, and one mile west of the Chenango river—it contains 130 acres, 30 acres in timber suitable for fencing and other farming purposes. The land is in a good state of cultivation, well fenced and watered. The buildings are extensive, commodious and mostly in good repair. A large orchard of grafted fruit. One half of a good water power and saw-mill included. Price $30 per acre.

Smyrna, July 1, 1852—2t.* J. W. COLLINS.

TRIAL OF IMPLEMENTS

BY THE

New-York State Agricultural Society,

July, 1852, at the Village of Geneva.

THE trial of Grain Reapers, Mowing Machines, Steam Engines for Farm purposes, Grain Drills. Horse Powers, Flax and Hemp Dressing Machines, Thrashers, Seed Planters, Cultivators and Broadcast Sowers, will take place at Geneva, between the 12th and 26th of July next. The particular day of the commencement of the trial will be given hereafter. (The competition will be open to all who become members of the Society, and enter their machines for the trial.) Upwards of $400 will be awarded to the successful candidates, and Inventors are invited to be present with their machines and engage in this trial, which will be conducted in a manner to secure practical and valuable results, that will be of importance to the whole Agricultural interests of our country.

☞ Persons desirous to compete must become members of the Society by the payment of $1.00, and enter their names and their implements with the Secretary, by the 5th of July.

All desired information, as to the regulations for the trial, will be furnished on application to the Secretary. B. P. JOHNSON,
Agricultural Rooms, Albany, May 7, 1852 Secretary.

ZEW-YORK AGRICULTURAL WAREHOUSE.

A. B. ALLEN & CO.,

189 and 191 Water Street, New-York.

HORSE POWERS, Threshers, and Separators. The Endless Chain or Railway Powers of our own manufacture, both single and double-geared, for one and two horses, which has never been equalled for lightness in running, strength, durability and economy. They are universally approved wherever they have been tried.

2d. The Bogardus Power, for one to four horses. These are compact and wholly of iron, and adapted to all kinds of work.

3d. Eddy's Circular Wrought-iron large Cog Wheels, for one to six horses. A new and favorite power.

4th. Trimble's Iron-sweep Power, for one to four horses.

THRESHERS.—Improved Threshers made upon the best principles, threshing clean with great rapidity.

FAN MILLS for Wheat, Rye, Oats, &c., of the best construction

RICE FAN MILLS made expressly for the South.

MILK PANS.—Glass and Enamelled Iron Milk Pans, very desirable articles.

CHURNS.—Thermometer, Atmospheric, Kendall's, and other kinds.

HAND CULTIVATORS and Hand Plows are very useful implements in garden culture.

SCYTHES.—Grass, Grain, Bush, and Lawn Scythes of the best kinds.

RAKES.—A large assortment Steel, Iron, and Wooden-headed Garden Rakes, and Lawn and Hay Rakes.

HORSE HAY RAKES of new and highly-improved patterns.

REAPING AND MOWING MACHINES—These have been fully tested, and embrace many late improvements, and we can highly recommend them.

GARDEN AND FIRE ENGINES, very useful machines, arranged on wheels, for watering gardens or walks, and afford protection from fire. They will throw a strong stream 40 feet high, are easily worked and not liable to get out of order. Also, small Garden Pumps and Syringes of various styles.

HAY AND COTTON PRESSES.—Bullock's Progressive Power Presses, combining improvements which make them by far the best in use.

WATER RAMS, Suction, Force, and Endless-Chain Pumps; Leather, Gutta-Percha, India-Rubber Hose, Lead Pipe, &c.

CABBAGE PLOW—Very light and convenient for working among cabbages.

POTATO PLOW, with double mould and other forms for hilling and weeding.

Our implements occupy three large stores, and we believe they make up the largest and most complete assortment in America. In addition, we have a machine shop employing upwards of one hundred men, where any articles in our line can be made to order.

A. B. ALLEN & CO.,
June 1, 1852—tf. 189 and 191 Water st., New-York.

THE CULTIVATOR

Is published on the first of each month, at Albany, N. Y., by

LUTHER TUCKER, PROPRIETOR.

$1 per Ann.—7 Copies for $5—15 for $10.

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ADVERTISEMENTS.—The charge for Advertisements is $1 for 12 lines, for each insertion. No variation made from these terms.

THE CULTIVATOR.

TO IMPROVE THE SOIL AND THE MIND.

NEW SERIES. ALBANY, AUGUST, 1852. VOL. IX.—NO. 8.

The Present Position of the Farmer.

As time rolls onward, there are periods in the social, as well as the political world, which are marked by more than ordinary interest. Such a period is now before us in the agricultural world. There never was a time when agriculture, as an occupation, was so well thought of and so favorably looked upon, as at this moment. The tide against which we have so long struggled, seems really about to turn, and many who formerly thought that the farmer's life was one of increasing toil, and that the farmer himself had no need of much more intelligence than the animal who aided him in his labor, really begin to think that it is possible for him to become a rational, thinking man, and through the aid of his intelligence to benefit his condition. True—there has been much eulogy pronounced upon the life of the farmer by some individuals in other occupations; for example, the politician, anxious to secure his election, has complimented the agriculturist to the fullest extent. He has called him the sinew of the country—the bone and muscle of the state, the sine qua non of society—while at the same time he has used him as a tool, wherewith he has worked himself into office, but he has taken good care, after once installed, to do nothing whatever for the benefit of agriculture. The merchant compliments agriculture, and talks of the beauties and charms of a country life—he sighs for the time when he can retire from the cares of business, and settle himself upon a farm. So too, the lawyer, the doctor—each in turn, long for the hour when they may lead a *farmer's life*. Indeed, farming seems to these men a kind of Eldorado, a perfect elysium, a resting place from all their labors. But this idea of farming is very different from the life that the practical agriculturist is leading. Few of the classes spoken of would like to become *working farmers*, or be dependent upon their farms for a support. All they mean is simply, that having accumulated money in other occupations, they are willing to spend a portion of it in rural pleasures.

What then is it, about what is called *practical* agriculture, that ceases to attract men to it, and even drives them from its ranks? But one answer to this question meets us on every side—its hard labor and small profit! And looking about through many sections of the country, seeing how many farmers live, (or rather exist,) one might almost be inclined to submit fully to the answer, and join in the general saying, that farming is truly all work and no profit, or very little at least. Look at that man, says one; he has toiled, toiled, toiled, through long days and weary years, and what has he made—something to be sure—but what he has got has been gained more by *saving* than *making*. He has denied himself the fruit of his own labor. He has stinted himself and his family, and scarce allowed them the common necessaries of life, and for what? Why to get a few paltry dollars together, that had he been engaged in any other business, he might have obtained with half the toil. Thus says the opposer of agriculture as an occupation, and he backs his assertion not by one case alone, but by scores.

Now, for my own part, I have ever considered agriculture as the most useful and honorable of all occupations, and as such, I am willing to stand by it through good and through evil report. I love its toils, for they are at least honest toils. I love its labors, for they are Heaven ordained. Nor do I believe a righteous Providence ever meant that an occupation, which is universally acknowledged, by great minds, at least, to be at the fountain head of all social prosperity, should be one so wanting in attraction, and in the proper reward due to labor, as to drive from its ranks all men of refinement and intelligence. Without wishing then, at present, to deny the objections so often urged against agriculture as an occupation, let us rather admit the facts of the case, and try to find out whether the occupation, or the men pursuing it, are in fault, and then seek for the remedy.

Now, if it could be proved, that no man had ever gained a competency for his labor, through agriculture as an occupation, and that all men following it had been always obliged to restrict themselves to the greatest economy, in order to gain a livelihood—that it had never, in any instance, paid a fair profit on the capital invested—then, indeed, we might be somewhat disheartened, and might consider our case rather a hopeless one. But I think a very different state of things can be proved. The single case of Mr. More, who took the second premium from the New-York State Agricultural Society, in 1850, would of itself, set the matter at rest—for it has been truly said, that "whatever man has done, man may do." So far as we can gather facts from Mr. More's statement, we think the amount actually made upon his capital invested, is very large, and as Mr. M. himself, has been unable, through bodily weakness, to do any of the hard physical labor, his statement proves conclusively, that the head can be made to work upon a farm, to as good advantage as the hand.

But again, in almost every county in this state, and others, where agricultural societies exist, men are found in the ranks of practical agriculture, contending for the premiums offered for crops of various kinds, and as the societies all demand affidavits from the several parties concerned, such as the surveyor who surveys the ground, the party who raises the crop, and the person or persons who assist in gathering and harvesting the crops, there is little room left for deception. The nett profit on these crops, after deducting all expenses, interest of land, &c., &c., varies from $30 to 100 per acre, according to circumstances—the average may be considered $50 per acre. I presume no one will deny that this is a large profit on the capital invested.

But, says one, still doubtful that anything can be made by farming, remember this is but *one acre;* it is not to be expected that a man can have his whole farm in such order. Here then, is just the very point that I would urge upon the attention of the farmers in our section of country at least. It is a system of *thorough culture,* combined with proper calculation—from these alone, are we to look for large profits. Land half worked can never more than half pay. *Thorough culture* is the only true system for any farmer, whether he cultivates 10 acres or 100. The more I have thought of this, scanned it from every side, and turned it over and over in my mind, and the more I have read about it, the more have I been satisfied that it is in the difference between imperfect and thorough culture, that lies all the mystery why some farmers make so little, and some so much. And now, in the next place, (for I must run over the subject rapidly, as in the space allotted for an article like this, we cannot be expected to cover the whole ground,) how are we to go to work, to introduce this system of thorough culture and calculation to the farming community generally.

There are two ways in which this can be done, and they are both somewhat connected, namely: By practicing it ourselves, thereby showing its utility, and by inducing farmers to think upon the subjects connected with their occupation. The first of these things is comparatively easy, but some difficulty attends the second. To overcome prejudices—to break down old systems of farming suited to by-gone days—to induce men to read and reflect about what they have always supposed needed no thought or reflection—all these and many other things are hard to contend with. But let us not despair—the object to be accomplished is a great one, and patience and perseverance will do much.

First, then, I say, let us conduct our own farming operations in a proper manner, with due regard to the fact that we wish to reap the reward of our labor and to receive the largest amount of profit upon our capital invested. Let us keep regular accounts with the several departments of our farms—the stock, crops, &c. &c.—let us calculate the cost of raising every article produced upon the farm, whether live stock, grain, or ought else—let us mark well what pays a profit and what does not. There is nothing, perhaps, in which farmers, as a class, are more negligent than in this one point, of keeping accounts. Few, so called, *practical farmers* have any idea of what number of pounds of hay a yoke of oxen will consume during the foddering season; so too of cows, horses, sheep, &c. &c.; everything is fed by guess work, and in consequence much farm produce is sold by guess work too. Merchants keep accounts, without them their business would certainly prove a failure; go to a merchant to buy goods, who has just received a supply from some city or distant country, who has not yet seen his bills or made up the amount of cost, and what will he tell you? "I do not know, sir, what to ask for those goods. I have not yet calculated their cost." But alas! what do too many farmers do? They calculate the cost of nothing. We raised this grain, say they, and we can afford to feed it out, it cost us nothing. Ah, my friend, is the expenditure of bone and muscle which that bushel of corn or potatoes cost thee, nothing? Were the drops from thy sweaty brow, with which thou watered many a hill through the long summer day, worth nothing? Other men in other occupations, live by their labor, whether of the body or the mind. Calculate then, friend, and know what thy labor is worth to thee.

I well know that circumstances alter cases, and that different systems of agriculture are suited to different sections; but I do say, without fear of contradiction, that in many sections the system generally pursued, is such an one, that without the most rigid economy, amounting even to parsimony, farmers could not live by their labor; and I attribute the fault, not to our noble calling, but to the negligence and want of calculation of those concerned in it. I have no theory to support, no selfish ends to serve; I only wish to awaken thought upon these subjects among farmers, and especially among the farmers of this section of our country. If I am wrong in my views, no man will be happier to be set right.

In regard to the question, how shall we induce farmers to think upon the subjects connected with their occupation, let me propose the following plan. I do not know of its ever having been tried, or how it will succeed generally, but perhaps some few districts at least may be benefitted by it.

Let notices be given out that monthly meetings in every school district will be called, beginning in October and ending in March; this would give six meetings during the winter. Let the district school-house be the place of meeting. At these meetings let such articles be read from the Transactions of the State Society, and from agricultural papers, as may be deemed interesting and beneficial to those present.

Some men will get together and listen to a little reading, whereas if they remained at home they would not touch a book during a winter evening, but doze in the chimney corner, or around the stove, or be at work at some manual labor, thinking they could not spare time to read a book.

Let such questions as the following be presented for their consideration: The cost of rearing stock, from the time of birth till three years old; the number of pounds of hay a yoke of oxen will consume during the foddering season; the cost of wintering, (not half starving,) a cow, a horse, a sheep, &c., &c., during the whole foddering season; the number of quarts of milk given by a good cow during the year; the number of quarts given by the same during the first week after the calf has been taken away, or four weeks after calving—this to be done by actual measurement in a quart measure, not by milking in a pail *supposed* to hold a certain number of quarts; the number of bushels of corn usually raised on an acre in the neighborhood; same of oats, of rye, buckwheat, &c., &c., actual measurement to be taken, instead of *cart loads*; the usual value of cows in the fall; the usual value of same animals in the spring; what a farmer gets therefore, for wintering said animals; the value of each farmer's hay, stalks, grain, &c., in the fall; the value of stock in the fall; the value of his stock in the spring, after consuming his hay, grain, &c., &c.; what his cows realized for him in the shape of milk and butter, during the season; how much nett profit they make him after deducting all expenses; the number of pounds that a bushel of corn weighs each year; same of wheat, rye, oats, buckwheat, &c., &c. These, and a hundred other questions of practical value, might be proposed at the various meetings. Let a number of farmers present take three or four of these questions at each meeting, and answer them as far as practicable, at the next meeting. Some of them would require a season to test them in—they can be given out and reported upon at the next winter meetings. These meetings will act as aids to the county agricultural societies, and through their means many men may be induced to join those valuable institutions, who would otherwise give themselves no trouble about them. The various questions may one and all of them have been tested by many intelligent and reading farmers, but I am pretty certain few so called *practical* farmers, have ever taken the pains to try any of them. Let such plain questions be once fairly put to trial, and I think the result would be a mass of facts that could not fail of being greatly beneficial to the interest of the farmers in their respective neighborhoods. We would then know better than most men, how to *shape our course.* By this means, a change in the mode of farming in some districts, might be brought about, and a more profitable course than the one pursued, might be adopted. What was proved to be unprofitable in one part of our country, would be left to be pursued in another, where it could be done with more advantage.

Many other things suggest themselves, but we will leave them to the reflecting minds of those noble spirits, a few of whom may be found in almost every neighborhood, who are wrapped up in the great cause of agriculture, and whose hearts are beating with high hopes and aspirations to elevate that noble, but hitherto down-trodden calling. H. C. W. *Putnam Valley, N. Y.*, 1852.

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Agricultural Education.

WHAT CAN BE DONE WITH PRESENT MEANS.—While much has been said, both wisely and unwisely, concerning the establishment of great Agricultural Schools; and while all attempts towards their endowment by state funds, have signally failed—is it not well to consider what can be accomplished with existing means? The establishment of Agricultural Colleges, is certainly, on all accounts, desirable; and it is to be hoped that the friends of agriculture will rally upon their next legislatures, in full force, and carry their measures in New-York and Massachusetts, at least. But we have already the means with which to work a vast change, and one scarcely less great, than any contemplated institution could perform.

OUR COMMON SCHOOLS are the starting point. Here let the efforts of the friends of rational husbandry commence. Are there not enough readers of the Cultivator, and kindred publications, in one-half the school districts of this state, to discuss the subject of agricultural education, in the school meetings? Let care be taken that trustees and superintendents of the common schools, be instructed to secure and encourage teachers who will instruct in scientific agriculture.

Let our County Ag. Societies secure the services of some competent person to attend teacher's institutes, and communicate instructions and enthusiasm to teachers, so as to fit them more perfectly to teach farmer's sons.

Let them also offer premiums to teachers, and classes, who shall teach and learn the most, and the best of this subject.

I should like to see such an announcement as the following from the Lewis Co. Agricultural Society:

"For the encouragement of the study of Agriculture in our common schools, the society offers the following premiums to teachers and scholars, to be awarded at the county fair, Sept. 1853.

1st premium. To each member of the class, not to exceed 10 in number, that evinces the best knowledge of Prof. Norton's Elements of Scientific Agriculture, a copy of Johnston's Lectures on Ag. Chemistry and Geology. To the teacher, Stephen's Farmer's Guide. 2d premium. To each member of the second best class not exceeding ten, Thomas' Fruit Culturist. To the teacher, Colman's European Agriculture. Classes to be examined by their teachers, before a questioning and a judging committee, consisting of D. P. Mayhew, A. M., principal of Lowville Academy, Hon. Francis Seger, and Rev. Calvin Yale, town superintendent of Martinsburgh."

Would that the quotation marks that enclose the above paragraph, were warranted! Would not such premiums give impulse to the study of agriculture? Would not as much interest be excited in such an exhibition, as in that of farm products, or of embroidery, or of plowing matches?

I cannot forbear here remarking, that the substitution of useful books, or farm and horticultural implements, for *money* premiums, would accomplish vast good in raising the tone of agricultural practice. There is no reason why farmers should not have money from other sources, and every reason why they should have good books, from such a source, embodying the experience of many, with reference to their pursuits, and which, instead of being merged into the general currency, shall always be before a man as an evidence and remembrancer of merit.

What county society will first pronounce these suggestions good, and act upon them?

TEACHERS who love your profession, and have zeal to honor it,—a word to you.

In "the rural districts" nine-tenths of the children you instruct are farmer's sons and daughters, full of robust health, blessing you with the beaming of bright eyes, and the joyous music of happy voices. Do you desire that they,—full of innocence and strength,—should grow up to the noble inheritance of "a sound mind in a sound body;" that they should honor the art that is the earliest and best? Be not content to let them pass into life—either the life of the farmer, or that of a profession-without knowing the beautiful truths, which the farmer ought to know, because he is a farmer; and which the young man aspiring to a profession ought to know, that he may intelligently settle upon his course of life.

Two years ago, excuse might be urged that we had no suitable text book. But now, Prof. Norton's admirable "Elements of Scientific Agriculture," leave no place for that objection. This book has met with higher praise than I can bestow upon it, but I can say that such is its admirable simplicity of style, and so logical is its arrangement, that in the course of some considerable experience as a teacher—I have never used so satisfactory a text book on any subject.

Any pupil who can master English grammar, is capable of studying it to advantage.

It is a natural proceeding to pass from the common school to the Academy, and here should be furnished all the facilities for equipping the teacher. It is gratifying to know that several of our academies are doing their duty in this respect. Let the friends of agriculture encourage them, and put others in the right way. Saml. W. Johnson. *Scott, Cortland co., N. Y.*

Cost of Growing Indian Corn.

Eds. Cultivator—While reading the Transactions of the N. Y. State Ag. Society for 1850, I particularly noticed some estimates of the cost of producing various crops, made by J. Delafield, Esq., in his Survey of Seneca County. Now, although these estimates may be a fair average of the cost of cultivation in the latitude of Seneca county, yet some of them may not be applicable to that of Albany county; and likewise the average cost of producing a given crop in Albany county, might vary materially from the cost of producing the same crop in some other parts of the state.

I have seen several estimates of the cost of cultivating Indian corn, per acre, no two of which I think were alike in the items or amount of expense, which shows that different individuals pursue a different course, either more or less expensive in cultivation, or in making up their accounts. *Some* neglect to put in some small items, which, though small on one or two acres, would amount to considerable when multiplied by 10 or 20; or the difference may arise from the texture and quality of the soil.

I would suggest that every farmer ought to know how much it costs him to raise a bushel of any kind of grain or roots, and what he can cultivate with the most profit. For this purpose he should have an account book, in which every field, or part of a field he cultivates, should have a place, the number of acres it contains, and all expense and labor incurred in its cultivation, even to the putting up of twine and scarecrows on his cornfield, for with the farmer as surely as with any other man, time is money; and if one hundred farmers in different parts of the state would pursue the above method, in regard to their cultivated crops, especially Indian corn, which is perhaps more generally cultivated throughout the state than any other grain, and give the results through the Cultivator, it would, no doubt, be equally useful and interesting.

I will now give Mr. Delafield's estimate of cultivating an acre of Indian corn, together with my experience with a piece of four acres in 1849, showing quite a difference in cost of cultivation; and I would observe that these four acres were some of the easiest tilled land I have, being a loam, part of it inclined to sandy and a part to clay, no stone, and having lain to meadow until the grass had nearly all run out, not turning off more than ¾ of a ton of poor hay per acre.

Estimated cost of one acre of Indian Corn.

Plowing and harvesting twice,........................		$2 76
Half of 30 loads of manure, at 12½ cts per load,.....		1 88
Hauling and distributing manure,..................		1 50
Planting,..		1 40
Seed, five quarts,.........................		0 20
First, second, and third hoeing,..................		1 95
Cutting and stouting,..............................		1 00
Husking and housing, at three cents per bushel,......		0 96
Shelling and delivering,...........................		0 50
Interest on value of land at $50 per acre,............		3 50
		$15 65
Product—Thirty-two bushels at 50 cts.,....	$16 00	
Two tons fodder,.	5 00	
	$21 00	
Profit per acre,...........................		5 35
		$21 00

My own experience.

Four days plowing, breaking up sod, at $2 per day,........		$8 00
Charge to this crop ¼ of 80 loads of stable manure, at 75 cts. per load,..............		15 00
Spreading manure, 2¼ days,..........................		1 25
Second plowing, three days at $2 per day, ...		6 00
Harrowing, 1¼ days,..................................		2 25
Furrowing or marking out, one day,.......................		1 25
Seed corn and pumpkin seed,...........................		1 00
Two men and two boys one day planting,..................		2 50
Cultivating for hoeing, man and horse two days,...........		2 00
First hoeing, seven days work, at five shillings,.............		4 38
Plowing for hilling, twice in a row each way, man and horse two days,..		2 00
Hilling, six days work, at five shillings,..................		3 75
Cutting and stouting, eight days work, at five shillings,.....		5 00
Husking 336 bushels ears of corn, at 4 cents, (had it all husked by the bushel,)		13 44
Carting corn and stalks to barn, ...		5 00
Sorting and drawing to market 275 bushels ears of merchantable corn, at 2 cents,.........		5 50
35 bushels hen manure, ashes, and plaster, applied after first hoeing, at 10 cents,........		3 50
Labor putting on the same, and twine to keep off crows,....		1 00
Interest on value of land, at $75 per acre,................		21 00
		$103 82
Product—275 bushels merchantable corn in the car, sold at 31 cts., ...	$85 25	
61 bushe.s poor corn, at 18¾ cts,.	11 44	
Stalks for fodder, at $5 per acre, ...	20 00	
50 loads pumpkins, ...	20 00	
	$136 69	

It will be observed that my four acres cost me $103.82, or $25.95 per acre; and that the product, without the pumpkins, amounted to $29.17 per acre, leaving a balance of $3.22 per acre, in favor of the crop, and by adding the pumpkins, of $8.22.

I have kept an account more or less accurate, for several years, of the expense of my corn crop, and have never seen an estimate or statement of the cost of raising an acre, which amounted to as much as I am convinced it costs me to raise it. Although it does not always cost me as much as in this instance, yet, taking the whole crop which grows on the land, I do not know that I ever raised a more profitable crop of corn. C. W. L. *Watervliet, April*, 1852.

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Curing Corn Stalks.—A correspondent of the Maine Farmer places his stalks butt upwards, and then, if it rains, all the water is thrown quickly off, and none lodges between the leaf and stalk. A long storm will thus injure them but little, while in the usual way they would become completely soaked.

The Agriculture and Marls of New-Jersey.

Editors Cult.—Having spent some time in West Jersey during the past winter, I propose to give your readers, many of whom are residents of that interesting region, a brief outline of its agricultural condition and facilities. The particular region of which I am best prepared to speak, is the western portion of Cumberland county.

The whole south and eastern portion of New-Jersey is an extended plain, no part rising over one or two hundred feet above tide water, and generally presenting a rolling, or undulating and wavy surface. This part of the state presents two varieties of soil—a light sand, in many places blown about by the wind, and a heavier variety, called *clayey*; it is so, compared with the still lighter soil, but a visitor from almost any other region would call this a sand, or sandy loam, containing a slight admixture of clay. The clayey portion appears to embrace a wedge-shaped tract, coming to a point at its south-western extremity, near Greenwich, Cumberland county, and widening as it extends north-easterly towards New-Brunswick, leaving a belt of barren sands on either side, upon the east, reaching to the sea-board. The agricultural history of West Jersey, as well as its military, has been rather an eventful one, and may serve as a warning to the inhabitants of many regions now commencing their agricultural career. The soil, though light, when first tilled, appears, from early accounts, to have been very fertile, save, perhaps, the most sandy barrens. But by hard cropping, without returning much in the form of manure, it was, after a series of years, reduced to a state of complete barrenness, and the lands were sold for a trifle, or left, in default of a purchaser, and the impoverished occupant found a home upon the virgin soil of the western wilds.

Many pursued this course, while a portion remained and gained a subsistence by cutting off the timber for the Philadelphia market, taking in return, pork, grain, flour, and the other necessaries of life. This course, I am told, was pursued until within twenty or twenty-five years, when the value of the land was reduced to the value of the timber upon it. Several circumstances at that time conspired to improve the agricultural condition of this region. One was the opening of the Philadelphia market by steam navigation; but the most marked impetus was given by the discovery of the *marl beds*.

These beds form a broken line along the westerly side of the clay deposit referred to, for many miles, extending at least, across Cumberland, Salem, and Gloucester counties. In Cumberland, and the south part of Salem county, the shell marl prevails, while further north, the *green sand* marl is found. These two kinds are very dissimilar in appearance, and each kind embraces many varieties of color and quality. Both seem to have originated in deposites of sea shells, and the bones of marine and land animals, the latter constituting but a small portion, and in many beds no visible trace of them is found. While in the shell marls the remains of a large number of the marine shell-fish are always present, and constitute a large portion of the main mass; bones are found only here and there, as the carcase of some sea monster happened to lie, as he was driven on to the shoals then having these *oyster beds* for their bottom. Shark's teeth are somewhat abundant, and the bones which have thus far come to my notice, appear to be those of fish and large lizzards, or saurians. It is somewhat difficult to give a correct idea of the appearance of a marl bed. Indeed, those near together appear quite different. Many are found, composed of various colors, as follows: first, and over the whole, from 3 to 15 feet of sand and fine gravel; then comes a layer of yellow marl, containing the imprints of shells which have wholly disappeared—this layer may be a foot or two deep. Then comes a strata of a dark color, nearly black, and may be thinner, or a little thicker than the yellow above it. In this are also the impressions of shells, but seldom the shell itself. Below these come the marl proper, varying in depth from a few inches, to 15 feet or more, made up of shells more or less decayed; most of them, however, readily fall to pieces on being moved or exposed to the air, yet a few in almost every bed will retain their form. Among these, the Perna, nearly as large as a horse's hoof, and several varieties of oyster, are predominant. From 60 to 70 per cent of sand is found in the best shell marl, and the mixture, when shovelled over, has a greyish appearance. Samples of all these varieties may be seen in the cabinet of the New-York State Agricultural Society. The above is only an outline of the general mode of appearance, each bed varying more or less in character. Careful analyses of these marls show the following composition:

	Top Yellow Marl.	*Top Black Marl.*	*Shell Marl.*
Organic matter, ...	6.25 pr. ct.	5.02 pr. ct.	2.57 pr. ct.
Sand,...............	70.44	85.57	67.23
Oxide of iron,.....	16.91	2.50	4.61
Alumina, ...	2.69	5.05	2.13
Sulphuric acid,....	.29	.. ...	1.70
Chlorine,...........	.03	.08	......
Carbonate of lime,.	2.37	1.58	13.60
Magnesia,..........	.10	.04	.03
Potash, ...	a little.	......	.69
Soda, ...	.92	.26	.26
Phosphoric acid,...	.....	......	......
	100.00	100.10	92 82

Though these results do not correspond very well with the analyses published in the report of Prof. Rogers, on the Geology of New-Jersey, it is believed from repeated experiments, that they give an average of the composition of the different varieties, yet no two samples would precisely correspond. At the beds, the marl sells at 25 to 75 cents per load of 20 bushels; from 10 to 30 loads per acre, are applied broadcast to the soil, and generally with good effect. Many instances are given where 20 loads per acre have been applied to the worn out barrens not capable of producing over five bushels of corn, that by this dressing alone are rendered productive for twenty years, with no other manure, producing 25 to 40 bushels of corn, and moderate crops of wheat, potatoes and clover. Beside the varieties of marl mentioned, there is also a *sour* kind found in the bottoms of beds where no shell occurs. This is so poisonous as to kill vegetation where it is placed, and render the land barren for years. This marl, however, contains most of the valuable substances found in the best kinds, and is used in compost heaps by a few, to great advantage, the ammonia evolved from the fermenting mass operating to neutralize the sulphuric acid, and decompose the sulphate of iron and alumina, which are the poisonous substances contained in the marl.

By this chemical change all the substances are rendered valuable to the plant, and the volatile gases of the manure are fixed and carted to the field. Prof. **Rogers** suggests that *lime* mixed with the sour marls would render them valuable, which is certainly worthy of a trial.

The improvement upon lands contiguous to the marl beds, by its use, has been almost incredible, especially where care has been taken in preserving the farm-yard and stable manure. A large amount of Guano has of late been applied, with most satisfactory results—crops of wheat and buckwheat being often doubled by the application of one or two hundred pounds per acre.

Since the rot has ruined the potato crop north, this has become an important article of culture in West Jersey. The yield is not large, ranging from 50 to 150 bushels per acre—but better flavored, or fairer sized potatoes are seldom met with, the disease never having invaded that region; and at ready sales at 75 cents to $1.50 per bushel the crop is a paying one. This season many farmers are planting from 10 to 40 acres, which will doubtless find a ready market, unless this vegetable regains its health in more northern regions. What this county is agriculturally, it has been made by *improvement* alone, and with its fine climate, the growing zeal and intelligence of its inhabitants, and a good and accessible market, it certainly bids fair to become a region of great fertility. There is still much vacant land, once cultivated but now overgrown with cedar, dwarf pine, oak, &c., among which the last corn hills are still visible, that can be bought at reasonable prices, and by judicious management readily brought to a fertile condition. Without marl, by the use of guano, bones, lime, plaster, &c., valuable farms have been reclaimed from this worthless condition, and rendered productive and beautiful. **Gurdon Evans, A. M.** *June*, 1852.

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Wool Growing in Michigan.

Editors Cultivator—In looking over the former numbers of the Cultivator, I notice that Mr. **Pettibone** throws down the glove to the whole west, for raising sheep and wool. Now we have no wish to disparage either the luxuriant pastures, or the good management, of our Vermont brethren, but we should be happy to let them and others know the advantages we do possess.

These advantages are found in our soil and climate. Our soil is a mixture of silica, of carbonate and phosphate of lime, of organic principles, with a small proportion of sulphur, iron, &c., constituting all the earths and metals necessary to give a rich and nutritive vegetation. On our Burr Oak plains and oak openings, which cover a large proportion of the peninsula, the heaviest rains are quickly absorbed by the earth, giving sheep and other animals a dry, healthy surface on which to repose. On the other hand, a mellow fallow, kept clean of vegetation, absorbs moisture from the atmosphere, and never becomes dry and hard, as I have seen in New-England. We have more lime diffused through our soil, than in any of the states east and south, to the Atlantic, and the Ohio River, and doubtless more than in the prairie states to the west.

But it is mostly in our climate that our advantages consist. The radiation of the caloric, (heat,) from the vast bodies of water, surrounding us on all sides except the south, renders our climate more mild than any part of the United States of corresponding latitude, east of the Rocky Mountains. Northern Ohio, though south of us, has more snow. Kentucky and Western Virginia, I have been told by persons who have resided there, have, for snow and cold weather, quite as severe a climate as we have in Jackson county; but their springs are earlier. It was stated some time since, in a newspaper, that at a certain time, the thermometer, on the Wisconsin side of lake Michigan, stood at 16° below zero. On the Michigan side, at the same time, 3° below; wind not noticed, but direction probably from west to east. We have a less amount of water falling in rains in Michigan, than at the east. This the topographical situation of our state indicates, and experience proves to be a fact. Our straw stacks in this wheat growing region give us some advantages, as sheep will do better with a change of straw, than confined wholly to hay. The less amount of rain, with the excellence of our soil, causes our feed to be rich for fattening purposes. Where small flocks have been kept, thirty pounds of tallow from a grass fed wether, have frequently been taken. But the question will be asked, how long must you fodder sheep in each winter, in Michigan? Having lived here 17 winters, I think that in four out of five winters from two to six weeks foddering may be necessary, where there are reserved lots for winter pasturage, or where the meadows or summer pastures, will afford feed. The other part of the winter they will do better on pasture, being housed at night, than on any description of dry feed. **R. Watkins.** *Napoleon, Michigan, June* 4, 1852.

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Wens.

Mr. Tucker—I sent you a communication, which appeared in the March number of the Cultivator, for 1851, respecting a wen, on the jaw of one of my cows; and doubtless, many of your readers are anxious to know what finely became of the poor creature.

After the March number was issued, I received a private communication, from Mr. Watson, in which he gave me some information, in regard to the treatment of different kinds of wens; and from what he wrote me, I soon came to the conclusion that my cow was a "goner." But as she had a young calf by her side, I concluded to let her raise it, if possible; although I often thought it would be an act of humanity, to knock them both in the head; for the calf by sucking her milk, emitted an effluvia as offensive as the wen itself.

This wen was attached to, or appeared to be an enlargement of the jaw bone; and it was with great difficulty that she could eat. Fed with potatoes, she did much better than when fed with other roots. When fed with turneps and corn meal, her wen would assume an angry, inflamed appearance, and smell very offensive. I discontinued the application of caustic potash, as it would increase in one day as much as a daily application of potash would diminish it.

As soon as there was a supply of grass, I turned her into the highway to "live or die." But to my great surprise, she soon improved in flesh, so that it was thought best to take her into the pasture. About the first of

September, I commenced feeding her with pumpkins and meal. To the astonishment of every one, she deteriorated until she became a skeleton; and about the first of October I killed her and took her hide. I examined, with much care, the diseased part; and often wondered *how she had lived at all.* I thrust a knife into it, and found it was a gristly, cartilaginous substance, full of little vesicles, containing blood and water. I forced the knife in another part of it, and a viscous, yellow ichor, issued out. Her grinders, on the diseased side of the jaw, were more than an inch longer than those on the opposite side. When they shut together, her mouth would be open about two inches. This accounted for the fact that she always carried her jaw on one side. I had often noticed that she performed mastication by moving her jaw from right to left, horizontally, without any vertical motion. This movement of her jaw crushed the food between the *sides* of the teeth, which I found were much worn away.

In conclusion, allow me to remark, for the benefit of any one who may be so unfortunate as to have a wen on any of their animals, that they should be prepared for the butcher without delay. Had I known *then*, what I know now, I should not have lost twenty-five dollars needlessly. Truly yours, S. Edwards Todd. *Lake Ridge, Tompkins co., N. Y.*

Farmer's Talk.

Eds. Cultivator—If there is any one class of citizens and laborers that I feel an interest in, more than another, it is the farmers. If I were asked the reason of this feeling, I should answer, it is because I am, myself, one of that class.

It has been often said by agricultural writers that farmers, as a class, are the least intelligent and poorest educated of any, and it often seems that we have the least influence and are the least respected. Whether this idea be correct or not, may be of no particular consequence in itself; yet, if such be the case, it is well to inquire whether, as farmers, we have not something to do in this matter.

It is certainly remarkable to notice what a small amount of useful knowledge, we can content ourselves with. The reason of this is, that our present wants must be satisfied and the future cared for, while the mind is left to starve. The great object of life appears to be to make money and buy more land. The life of an American farmer has always been and must ever be, one of labor. This law of labor we cannot alter, and we would not if we could, because it is just and right. Yet I am satisfied that the mass of farmers labor a great many more hours in a year, than is necessary, because they do not work to the best advantage. We do not combine half enough of genuine head labor with our hand work, and for the ostensible reason that we can get along just as well without it. But it is not enough that a farmer can improve his soil so as to make it profitable, for hundreds of farmers do that, who possess an amount of general knowledge which every good citizen ought to be ashamed of.

There is a principle beyond all this, which every farmer ought to recognise, that is, to adopt improvement for improvement's sake. Not so much to gratify a selfish and penurious appetite, as to refine and enlarge the generous, noble feelings of the *man*. Like all other classes of men we are in pursuit of happiness, and one of the most common methods of seeking it, yet by far the most unsatisfactory, is in the pursuit of wealth.

One of the best antidotes for this restless, craving feeling, is to seek for and cultivate a contented mind, but not a dull and sluggish one; for with all the followers that "Ignoramus" has had from time immemorial, he has never succeeded in making a single person rationally happy and contented. I believe firmly that the occupation of the farmer is better calculated to ensure real enjoyment than any other business. Still there are hundreds of farmers who live a toilsome and complaining life because they do not labor for the right objects.

I am well aware that it must be the farmer's general rule to carry on his business for profit, and I find that those farmers who adopt the most improvements, both useful and ornamental, are the *ones* who succeed best and make the most money.

We have often to struggle against poverty, but this should not discourage us. Honesty of purpose, with an indomitable perseverance and energy, will eventually accomplish anything. We may safely depend that in industry and the improvement of the mind, we are laying the foundation for future good and real success. L. Durand. *Derby, Ct.*

Things I have Seen.

1. I have seen farmers, who neglected to mend their fences in the spring, till after planting, and allowed their cattle and other stock to ramble about, till they had no control over them, which nine times out of ten will make them unruly.

2. I have seen farmers pasture their swine in the highway, without a yoke or a ring in their nose, greatly annoying their neighbors, by turning up the turf before their dwellings, ready to enter the door-yard or garden whenever there is a bar down, or a gate open, or a hole in the fence, forgetting the golden rule, "whatever ye would that men should do to you, do ye even so unto them."

3. I have seen farmers let their best land grow up to briars and weeds, and remain from year to year encumbered with all manner of trash, thus fulfilling the proverb, "I went by the field of the slothful and the vineyard of the man void of understanding, and lo, it was all grown over with thorns, and nettles had covered the face thereof, and the stone wall thereof was broken down."

4. I have seen farmers who had a tolerable theory of farming in their heads, but not the first principle in practice, and were like the Scribes and Pharisies, "for they say and do not."

5. I have seen farmers who thought it wicked to cultivate a fine garden, shrubbery, ornamental trees, flowers, or anything to make their homes pleasant and inviting, not discerning the hand of the Creator in all the works of nature—but who esteemed it no sin to suffer their children to grow up in idleness, roving about with no taste for anything pertaining to home.

6. I have seen farmers who let their tools remain in the field in all weathers, and during the winter, saving a great deal of time in not carrying them to and from their store houses, it is true, but forgetting the old maxim "a penny saved is as good as two pence earned."

7. I have seen farmers who knew enough of farming without reading the Cultivator, and could not afford to take it, but who were able to pay for a novel, or some trash paper of the day.

8. I have seen farmers, who were very officious in their neighbor's business, and strange as it may seem, neglected their own. Geo. Cargill. *Berkshire, N. Y.*

Osage Orange Hedges.

The Machura aurantica, or Osage Orange tree, is found in portions of upper Texas, Arkansas, northern Louisiana, and the southern portion of the Indian territory, in a native state; and, in point of appearance, closely resembles the orange tree. It bears a large and beautiful fruit, which is remarkably tempting in appearance, but it is perfectly useless for man and beast. The foliage somewhat resembles that of the peach, but of a richer and more transparent green, and, in many respects, it may be ranked among the most splendid of the forest trees. Its growth is uncommonly prolific, so much so, that on a rich vegetable soil, it will throw out branches varying from three to ten feet, in a single season. The growth is so rapid, whilst the plants are young, that it matures its wood imperfectly; so much so, indeed, that in the center of each stalk of young growth, a pith is formed, closely resembling that of elder. Yet this influence does not extend beyond the second year's growth, and as the wood perfects itself, it becomes nearly as hard as lignum-vitae, and is as incorruptible as the cedar. In its native clime, it ordinarily makes a growth of fifty feet in height, and, when grown separately as standard trees, will girt, at maturity, from eight to ten feet, four feet from the ground. Saw logs three feet in diameter, are frequently cut from this tree along the valleys of the Osage river; and the wood, though difficult to saw into lumber, and work with edge tools, is highly prized, from the fact that it not only makes a beautiful quality of furniture, but will take the highest and most perfect polish and finish. Among the other peculiarities of this splendid tree, its limbs are densely covered with thorns, so sharp that no animal can safely come in contact with its foliage; and owing to this peculiar quality, it has recently been introduced as a hedging plant, and the adaptation and management of which, demands a somewhat critical notice at this particular crisis.

Being pretty thoroughly acquainted with the management of the English hawthorn for hedging purposes, which is known to be a dwarf or shrub, it was natural to look upon the introduction of a large class of forest trees for a hedging plant, with doubtful forebodings; and the more we investigated the subject, the more convinced we became, that those who planted largely for fencing purposes, would ultimately have reason to regret it. The objections frequently urged on our part, against the osage orange hedge, are clearly indicated in the description given of the habits and character of the plant, at the head of this article; and although disposed to condemn the whole *mania* as a modern humbug, yet the importance of introducing a successful system of hedging, became so apparent, from the great scarcity of fencing timber in many of the oldest states, and on the western prairies, that we were inclined, against our supposed better judgment, to look favorably upon a movement, that would either prove to be a great curse or a blessing to the agricultural community. The rapid and enormous growth of the tree; its tendency to throw off lateral branches in nearly a horizontal direction; the unsoundness of the wood at its heart, the large expense that would have to be incurred in keeping the hedge in proper shape and limits; the aptitude of the plant forming a standard tree, in spite of the numerous trimmings and prunings that may be employed, to convert it into a dwarf; and the natural tendency of the lower limbs and branches to decay, are among the prominent reasons that prompted us to look coolly on at the movement for extending the propagation of the Maclura for hedging purposes. The beauty of the plant, and its powers of resistance for fencing, aside from our apprehensions of its ultimate failure, prompt us to acknowledge that we are daily becoming more hopeful that the ardent friends of the speculation, may realise their most sanguine expectations. Entertaining none but the most kindly feelings toward those who are engaged in the propagation and sale of Osage Orange plants, we shall without further criticising their qualities, take a more practical view of the subject.

The seed are gathered mostly by the Indians, in northern Texas and the Indian territories, and with much difficulty and expense are separated from the pulpy parts of the fruit; and its value ranges from $20 to $40 per bushel. Its appearance resembles cucumber seed, and a quart of sound seed will produce 5,000 plants. These plants of one year old, command a price ranging from $5 to $10 per 1,000, which will plant nearly one mile of fence, placing the plants a foot apart in the rows, or a half a mile if planted in a double row six inches asunder, and a foot between each plant in the row, making them alternate, so that plants will be only six inches from each other, in the direct line. Double rows for small enclosures, are thought better than single ones, even supposing that it took an equal number of plants to make the hedge, on account of the closeness that the bottom of the hedge row may be made, when it presents a broad base of thrifty growing young plants. On the prairies of central and southern Illinois, the propagation of the osage orange plant for hedging purposes, has been engaged in more extensively than in any other portion of the union; and latterly, the practice of planting only one row and placing them a foot asunder, finds favor among the practical farmers generally.

The seed are somewhat difficult to germinate, and the practice almost universally adopted, is to scald it with hot water, before being planted in drills, and after being thus treated it is put into a cask or vessel, and allowed to remain in a damp condition for twenty-four hours before being planted, by which treatment it will come up regularly, and if the seed be of good quality, but few will miss in producing healthy plants. The seed should be sown two inches apart, in rows, about eighteen inches asunder, and the horse hoe or cultivator by being passed between them, about three times in the season, will thoroughly free the ground from weeds, and a simple and cheap process of cultivation of this kind, will, in ordinary cases secure a fine growth of plants the first year, averaging two feet in height. The period for planting seed may be safely delayed till the ordinary season for planting corn, but no precise time appears necessary, as the plants are hardy, and early planting answers a good purpose providing the soil be warm, and the sun has power sufficient to push forward a healthy growth; and in 40 degrees north latitude planting has frequently been done as late as the 10th of June with admirable success. The hedge row, previous to setting out the plants, should be brought into a high state of cultivation by frequent plowings and harrowings, and a neat furrow may be made with the plow in the exact line where it is intended to plant the hedge. The planting may then commence, and by placing the plant along perpendicularly against the furrows, the plow may again be employed in covering the roots, and in the hands of an expert workman, the work may be as perfectly done as if the spade alone were used. The first year the only thing requisite to be done, would be to keep down the weeds by working the land some three feet each side of the row with a plow and cultivator, for the purpose of subduing weeds and grass, and bringing the soil into a perfect state of tilth, so as to secure a luxuriant and rapid growth. Some adopt the plan of heading down the plants even with the surface, the first season they are removed to the hedge row, and when this is done, they push forth a stunted growth, and the object sought for is not so perfectly attained, as if they were left unmolested till the spring of the second year. The great thing to be accomplished in rearing an Osage Orange hedge, is to get a thick and thrifty growth near the ground, and this may to a certainty be obtained by cutting down the plant the second year, before the leaves make their appearance in the spring, quite even with the ground, and by covering the stubs with about two inches of finely pulverised vegetable mould, each plant will send forth some six or eight shoots, which, in an average of cases, will attain four feet in height during the succeeding summer. The third year, a sharp pruning hook may be used to head it down some thirty inches from the ground, and the fourth year the hedge will form a perfect protection against all kinds of stock, and even the smallest bird cannot pass through it without risking its life. In a wood country, where land is valuable, and timber is of but little consequence, the hedge may be trimmed every spring for the purpose of keeping it in proper limits, and in fact it appears absolutely necessary to attend closely to this matter, where the farm is divided into fields of from ten to twenty acres each. The method of planting, trimming, cultivating, and heading down, may be varied to suit the taste and convenience of the owner of the hedge; and the one here adverted to, is adapted for those who may engage extensively in the business. Each cultivator has plans and views of his own; but the system here recommended will be found to answer all practical purposes, and will be considerably cheaper than the common plans in use.

There can now be no question, but that the Maclura will answer an admirable purpose for hedging on the extensive prairies of the west; and if it should so turn out that it would not bear the requisite prunings, for a timbered country, yet on this account it should not be rejected on extensive prairies. It would be no objection, but rather an advantage to the prairie farmer, if the hedge grew 30 feet in height. A hedge of this kind, if made to grow thick at the bottom, will not only prevent the possibility of every description of animals that would do damage to the crops, from passing through or over it, but it would have a salutary influence in protecting the crops of grain and grasses, and vegetables, from raking winds and storms, and in an especial manner would it relieve a prairie country from its frightfully monotonous appearance. When allowed to grow some 25 to 30 feet in height, the timber would become very valuable for posts and other purposes, and if cut down close to the ground, so that the stumps may be covered with fine mould to protect them from the sun, a prodigiously thick growth would spring up, which would form a perfect hedge the second year. The plant being tap-rooted, to a remarkable degree, no danger need be apprehended of its spreading over the ground like the locust, cotton wood, and other varieties of forest trees, that are noted for their rapid growth and early maturity. In consequence of this habit, may be attributed the extraordinary tenacity of life which peculiarly stamps the character of this tree. Indeed, in planting a hundred thousand young trees, there is no necessity of calculating one in a thousand, to fail in growing, and on this account a perfect uniformity in the appearance of the hedge may be kept up, and defective spots will rarely occur.

The conviction that the Osage Orange plant, is all that has been recommended for fencing purposes, has taken a strong hold of the public mind in central and southern Illinois, Missouri, southern Iowa, Indiana, and Ohio, and it is to be hoped that the most sanguine expectations of its warmest advocates may be more than realised. It will flourish in any latitude or climate where the peach will grow successfully in open culture, and even if the top limbs should become damaged slightly by frost, it would only tend to make the hedge grow more thickly at its bottom.

Professor Turner of Jacksonville, Illinois, has this year THIRTY FIVE ACRES OF PLANTS, which through the active exertions of travelling agents, will be thrown into market the ensuing spring, from which the proprietor will reap a golden harvest. A vast number of others are engaged in the business, and having the best feelings for all interested in the speculation, we shall, for some time to come, watch with interest the final result. G. W. EDMUNDSON. *Keokuk, Iowa.*

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History of the Short-horns.

It seems necessary to make some reply to the article of AMBROSE STEVENS, in the Cultivator for July; but I will, in so doing, occupy as little space as practicable.

1. The charge against me of misrepresentation. I said that Mr. Stevens had admitted, by implication, that Sir James Penniman's and Sir Wm. St. Quintin's stocks of cattle came from Normandy. The grounds of this statement are these: In Mr. Stevens' article in the *Transactions* for 1849, he said the family of Aislabies came from Normandy, and that this family had these cattle. He did not say where they obtained the cattle; hence I remarked that the most natural inference would be that they were Norman stock. This inference is rendered *more* natural, from the fact that Mr. Stevens admits the stock of Sir James Penniman to be the same as that of the Aislabics. In his article in the *Transactions,* he says "the Pennimans of Ormsby, in Yorkshire, procured cows and used bulls from Aislabie." He now says he "did not mention St. Quintin or his cattle." But I showed that what he said of the identity of the Aislabie and Penniman stocks was enough, and that by this we had a key to understand what this Aislabie stock really was. I then showed by extracts from the English Herd-Book and various other writings, that *Sir James Penniman obtained his celebrated cattle of Sir Wm. St. Quintin,* and that they were deemed of Norman extract —or had more or less Norman blood. Thus proving that the Aislabie and Penniman stocks, (admitting Mr. Stevens' statement that these two were the same in blood,) were the same as the St. Quintin. Mr. Stevens' own language in regard to the Aislabie family and their cattle, coupled with the fact that stock which he admits to have been the same, was deemed as more or less Norman in blood, furnished the ground on which I used the expression of which he complains. The public will judge whether there is any misrepresentation.

2. Mr. Stevens says the English Short-horns have had no connection with the Short-horns of the Continent since 1600. In what he calls "corrections of Mr. Berry, and further Historical Notices of the Short-horns," he alleges, to prove this position, that a statute of Parliament prohibiting the introduction of cattle, was passed in 1666, and continued till 1841, and "was *always enforced,* except from 1801 to 1814."

I noticed this statement on a former occasion, in reviewing his "corrections," &c., and remarked that although I had then no information in regard to the existence of such a law, it was evident from the testimony of many of the most reputable authors, that there was no such barrier to the introduction of cattle into England, as claimed by Mr. Stevens. I cited Youatt, Berry, Martin, Culley, Bailey, and Low,—all of whom admit, and most of whom assert, positively, that cattle were imported from the Continent during the time when Mr. Stevens says no importation could have taken place.

It might be thought sufficient to simply array Mr. Stevens' assertion against these acknowledged authorities. But I am happy to have it in my power to give more direct and important evidence on the subject, for which I am indebted to B. P. JOHNSON, Esq., Secretary of the New-York State Agricultural Society, who did me the favor to make the necessary examinations, during his visit to England last year as Agent from the State of New-York to the great Exhibition. He says—

"In 1666, (Charles the 2d,) a law was passed, prohibiting the importation of cattle from Ireland and foreign countries, (except the Isle of Man,) from the second day of February, 1666, for the term of seven years, and until the end of the first session of the next Parliament.

"This act expired, and in 1680, (32d of Charles 2d reign,) was revised and made perpetual, with this express provision—'That any cattle that are or shall be in England *before* the second of February, 1680, shall not be liable to forfeiture.'

"The preamble and title of both the above laws show, that the importation of cattle from abroad, was considered a great detriment to the farmers of the kingdom of Great Britain, and these restrictive measures were resorted to, in order that encouragement should be afforded to the rearing of cattle among themselves.

"In 1670, (19 and 20 Charles 2d,) a law was passed that after June 24th, 1671, it might be lawful for *foreigners* as well as Freemen, to buy and sell any 'cattle in Smithfield market—any custom or usage to the contrary notwithstanding.'

"In 1685, the foregoing act was continued in force for seven years.

"George 3d, 10th, an act was passed to *prevent* importation of cattle from abroad, on account of the 'contagious disease' IN EUROPE—the law to continue in force to 1771, (two years, I think,) and in 1772, it was extended to 1774, as the disease still continued.

"This shows that *cattle were imported at that time*, or else these laws would have been entirely nugatory.

"In 1772 a law was passed for seven years, giving full liberty to import cattle from *Ireland*, which had been prohibited by the law of Charles 2d. And in 1776, the above act was made perpetual. (There had been no prohibition between the *Continent* and Ireland during all this time.)"

It is unnecessary to add a word to the above explicit and authentic facts, to show that no such prohibition existed as is asserted by Mr. Stevens. The statement of various historians, therefore, in regard to the importation of cattle into England at different periods "since 1600,"—and that some of these importations contributed to the improvement of the Short-horned breed,—remains unshaken by Mr. Stevens' attack.

3. Besides asserting that the English Short-horns have had no connection with the Short-horns of the Continent since 1600, Mr. Stevens says: "*as a breed* they are and *ever have been pure;* and *all* Short-horns recorded in the Herd-Book are purely of that kind, except such as have the Scotch Galloway blood, introduced by Charles Colling."

There is an ambiguity about the expression "*as a breed.*" It may mean that though some animals of the breed have been crossed, all have not. This is no doubt correct. But can it be possible that Mr. Stevens means to say that *all* Herd-Book Short-horns are of *pure blood* except such as have the Galloway cross? If so he has probably obtained some light on the subject within a short time; for without adverting to other examples, it is presumed he will not deny having said that at least two bulls sent to this country by a late noted Short-horn breeder, and "recorded in the Herd-Book," had West Highland blood in them! Sanford Howard.

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The Bingham Sheep Shearing.

Eds. Cultivator—On the morning of the 18th May last, we left the village of Middlebury, on the Rutland railroad, to attend an agricultural festival, at the residence of one of the well known farmers in Vermont. It was a bright clear day, and our road for some miles lay along the top of the gentle acclivity, which separates the valley of Otter Creek from that of Lake Champlain. The prospect from this ridge, embracing as it does, the windings of the gentle river, skirted in the distance by the mountains on the east and south; and on the west undulating from hill to valley, each rising upon the other, till it culminates at eighty miles in the lofty peaks of the Adirondac, renders the town of Cornwall one of the most beautiful and picturesque spots in the whole country. The valleys on either side were highly cultivated, and dotted at intervals with frequent cottages, whose white fronts and neat enclosures, contrasted strikingly with the deep green of a luxuriant vegetation.

On arrival at the place of our destination, we were cordially received by A. L. Bingham, the host of the day, a plain practical farmer, justly worthy of praise for the intelligence and enterprise, with which he has introduced important improvements in several kinds of agricultural stock, and more particularly in French Merino sheep. One object of his festival was to exhibit these sheep at the time of shearing. A large collection of people from the surrounding country, and some even from distant states, had already gathered to attend the party and witness the shearing. A big barn had been cleared and prepared with seats, from which a half dozen shearers might be seen busily employed in removing the fleeces from the heavily laden sheep. A committee of gentlemen was appointed to take the weight of the body and of each fleece as soon as sheared.

The first day, (for the festival was of two days continuance,) was devoted to the shearing of yearling ewes, of which the committee reported thirty three had been shorn. From their report we learn that the heaviest weight of body was 112½ lbs., and the heaviest weight of fleece was 21 lbs.; and the lightest weight of body was 82 lbs., and the lightest weight of fleece was 13¾ lbs. Fourteen of these yearling ewes sheared more than 17 lbs. to the fleece. The average weight of the ewes was about ninety-one pounds, and the average weight of their fleeces, a little over seventeen pounds. We also saw the shearing of a two-year-old buck, and saw the fleece weighed. The buck weighed 183 lbs., and the fleece twenty-five and a quarter pounds.

A capital and abundant dinner was provided, near a beautiful maple grove in the open fields, for all the visitors, by the hospitable host, during the partaking of which, a large and well cultivated band discoursed most eloquent music. Several hundreds found at the table ample satisfaction for the wants which the clear bracing air, and the drive and ramble through the country had, by dinner time, made decidedly imperative.

After dinner we took a stroll through the grounds and examined the numerous specimens of stock which fell under our eye. We saw a flock of French Merino bucks which had just arrived from the pastures of Victor Gilbert in France, and which seemed, notwithstanding their long voyage, in excellent order and quite at home in the new world. We also saw a three year old buck, raised by Mr. Bingham, and which weighed 292½ pounds! At another place, quite unconscious of his honors, and chewing his cud like an ordinary sheep, stood the celebrated buck *Napoleon*, which took the silver cup at the American Institute, and the prizes at the state fairs of Maryland, Pennsylvania, and Ohio. This giant was relieved of just eighteen months growth of wool on the 11th of May last, and the *fleece weighed forty-seven pounds.*

Passing on, we encountered among other cattle, a Durham calf, not then a year old, which weighed *fifteen hundred pounds;* and Mr. Bingham's other Durhams, with beautiful specimens of Herefords, and mixed breeds of divers sorts were presented, and particular among worthies, was the Hereford cow "Fanny," pronounced by competent judges, the best in the United States.

Returning to the house, we found numerous elegant horses, with trotting gigs attached, which the neighbors from Cornwell and adjoining towns, had trotted out for inspection. These were regarded as the crack horses of the country round about, and were mainly coal-black, small, but compactly built, and highly spirited animals. One of them we agreed, was the most elegant animal we had ever seen. They were mostly the progeny of a noted horse owned in the vicinity, by David Hill, Esq., and known as "Black Hawk."

As evening came on we reluctantly left the place of our cordial entertainment, and in the rays of the setting sun, bid farewell to a scene and a day vividly impressed on our minds as one of the most interesting and peculiar we had ever experienced.

We had read of the games and festivals of bye-gone ages, when some old baron would collect together his vassels and his serfs, and on some broad green, broach his puncheons of ale, and disseminate his beef—and now here had been reproduced a similar gala day—but under what different auspices, and for what different uses! A noted farmer invites in all his friends; throws the door open for strangers; gives and receives information; exemplifies his views by his productions; extends his acquaintance; knits his friends closer around him; breaks up prejudices, and creates a festival, which, while it results in benefit to himself, cannot fail to contribute something to the agricultural advancement of his neighbors, and the general promotion of the farming interest. We regard the example as eminently worty of imitation. Viator. *Vermont*, 1852.

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Paint for Wire Fences.—The chief advantage of painting the wires white, is to prevent their becoming so much heated by the sun's rays, and consequently expanded and slackened. Prof. Mapes says the best white paint is a mixture of white oxide of zinc with gutta percha, rubbed on while the wire is kept hot by means of a "small lamp." It strikes us that a *very large* lamp would be indispensible to even a tolerable degree of expedition—would it not be better, to heat whole coils by a fire? Is this a cheap or a costly paint?

Notes of a Tour in France.—No. 3.

The annual sale of sheep from the government flock at Rambouillet, being advertised to take place on the 27th of April, I made my arrangements to accompany my host, Mons. G. and his son, to a friend's house the day preceding, and thence to drive over to the sale the next morning. As is invariably the case, the auction was on Sunday; that day being chosen in France for all such public occasions. Church going on any *particular* day is no part of a Frenchman's creed; but is usually left to the female portion of the household, who go to mass, whilst their liege lords go to market or fair. This no doubt arises in part from the churches being open *all* day and *every* day. The passers by drop in and patter an " ave" or " credo," cross themselves, and go on their way rejoicing, entering the church as carelessly as they would a cabaret; not but what there are many sincere worshippers at these ever open shrines. Many a tired wayfarer kneels there, and lays aside for a moment the cares and burthens of life, to rise up strengthened and refreshed for his daily toil. But ever since the revolution of 1799, the French, as a people, have been very lax in their religious principles.

But to return, the sale is always looked forward to with great interest by all Merino breeders in France, who make it a point to attend. Besides seeing the results of the year's breeding in the government flock, and comparing it with their own progress, they there meet all interested in their particular pursuit, compare notes, make exchanges, sales, &c., &c. It is also important in a pecuniary point of view, for as prices rule at Rambouillet, so they rise or fall throughout the department, (except perhaps in the case of one or two leading breeders.) Foreign flock-masters or their agents are generally represented there, and many of the best animals are often bought at a high figure to cross with the vast flocks of central Europe and southern Russia. On the present occasion some Englishmen from the far away island continent of Australia, were spirited bidders, and bought no less than 28 rams to send to Sidney, risking the dangers and losses of a six months voyage. But they told me " that they were so delighted with the sheep, that they could not help buying, forgetting expense, risk, distance, everything." I observed, however, they bought none of the highest priced sheep, thinking, no doubt, that even an ordinary ram of this heavy fleeced variety, would greatly ameliorate and increase the yield of the New South Wales flocks, which now produce a fine but light fleece; whilst the loss in case of accident would be much less.

It was raining as we drove through the narrow streets of the old town of Rambouillet. The quaint irregular outlines of the buildings, so unlike the prim stiffness of our country towns, looked gloomy enough against the dull horizon, whose leaden hue gave little hopes of a fine day for the *sale*. A dragoon with dispatches dashing hastily along, and a few peasants clattering by in their clumsy wooden shoes, were the only living things to be seen. Here, as in many of the provincial towns in France, the march of improvement has been but slow. The streets have no sidewalks, but the gutter runs through the middle of them. They are lighted at night by lanterns, suspended from cords that stretch from side to side, passing over a pulley in the walls. It was these *convenient* cords that gave rise to the terrible cry of the mob, so often heard during the first revolution, " a la lanterne!" which meant, hang the offender to the nearest lantern rope. A sharp turn to the left, under the gateway of the inn, soon changed the scene. The yard was filled with vehicles of all sorts and sizes; from the heavy modern cabriolet of the neighboring proprietor, to the almost antideluvian conveyance of some village mayor a dignitary corresponding to our justice of the peace. Horses were neighing, biting, kicking, and plunging, blue bloused hostlers were shouting and swearing and bringing very little to pass; and white aproned waiters were rushing across the yard from the kitchen to the dining room, threading their way through the crowd with marvelous dexterity. Amid this babel of sounds, we alighted and made our way into the " salle a manger;" my conductors, on their entrance, were assailed by a volley of welcomes, questions and remarks from the large party, to most of whom they were known, who were busy doing justice to the ample mid-day meal, called by them breakfast; and we were at once invited to join them. This breakfast is a most substantial repast, answering very well to our dinner. It begins classically with eggs, and ends with fruit, " ab ovo usque ad mala." There are several courses of meat, and it is always accompanied by wine. The usual hour in the country is between eleven and twelve, before which time nothing is taken but a bowl of coffee or chocolate, and a slice of toast on first rising; so that one is quite ready for the somewhat elaborate and late *breakfast.* Dinner at five or six o'clock only differs in beginning with soup.

The appointed hour having arrived, we started for the sale; and after some bargaining with a huge red-faced woman, who seemed possessor of all the horses and carriages in town, we were packed into a sort of omnibus drawn by one horse, to the number of a dozen, and slowly dragged up to the national establishment. Any but a Norman horse, would have given up in despair at the first pinch of the steep ascent; but the sturdy little bay, at an encouraging word from his driver, settled into the collar and tugged manfully on, and at length mastered the muddy, slippery hill, and landed us safely at the gate. This journey he repeated many times during the day, without apparent distress.

The auction is held under a large shed, open on all sides, supported by massive stone columns. Beneath this the sheep to be sold are placed in lots, for the convenience of being examined by the purchasers. In the middle a space is railed off, on the outside of which the bidders stand; into this area, the animal designated by his number, (which is branded on the horn,) is brought, and led around by one of the shepherds. No particular order is observed in putting them up. A clerk and accountant at a side table, record the number, price, and purchaser. All sales are for cash.

Mons. Pichat, the then director of the flocks, was present, though having nothing personally to do with the sale. His duties end with the selection of the sheep to be disposed of. This being a government affair, every detail and process, though liberal and exact, is slow and cumbrous. A committee is appointed, who come out and examine the selected sheep, and report to the Minister of Agriculture, who then authorises the Director to to sell them. To procure particular sheep not in the lot, would require almost as much diplomacy and management, as to get a cabinet appointment! Usually, both rams and ewes are sold, but this season none of the latter were disposed of, as it was intended to increase the breeding flock. Every thing pertaining to the actual business of the sale, was very quietly and rapidly done, and in three hours the whole fifty-two rams were sold, and the company dispersed, except those, who in spite of the weather, stayed to visit the establishment, which is always open to inspection. The prices realised were high, and the foreign bids so large, that only seven rams were sold to remain in the country!

The whilom *royal* flock of Rambouillet, it is well known, was imported from Spain in 1786. The sheep were selected from the best and most celebrated flocks in Spain, reference being had to the various distinctive excellencies of the different families that then composed the elite of the Spanish sheep; as it was intended to produce a breed that should *unite* the best qualities of all of them in *one* animal! Neither pains nor expense were spared, to have them worthy of their royal destination, and their descendants prove how successful must have been the choice. Up to the period of this importation, agriculture, and especially the breeding of domestic animals, was at a very low ebb in France; and this was a most laudable attempt of Louis XVI to improve the character of his wool bearing subjects. There had been at least one previous importation of Spanish sheep, towards the early part of the 18th century; but so slow was the progress of the *new* breed, that when the Rambouillet flock was established, little or no improvement had been made. Even now, after the lapse of more than half a century, the numbers of the improved breed is inconsiderable. Within a few leagues of Rambouillet, there are thousands of sheep bearing little and coarse wool, seldom reaching fifty lbs. live weight, and only fit for mutton. The district they inhabit, it must be allowed, is poor and rugged. Their fair is seanty in summer, and they live by browsing in winter. The mutton, however, is high flavored, corresponding to the Welsh mutton so much prized by English epicures; and when bought by the feeders, as they are occasionally, and put into good pasture, they fatten kindly.

All the buildings and arrangements at Rambouillet, are very complete. The large sheep-houses are of stone, and built with every reference to the health and comfort of the sheep. The farm, however, connected with the establishment, is quite poor in quality, the land being very light. The Director is appointed by the government, and he is often changed, which militates somewhat against the regular improvement of the flock, though its even and distinctive character speaks well for the scientific course of breeding that, through a series of years, has so thoroughly and advantageously amalgamated the heterogeneous materials obtained from the various Spanish flocks out of which it is formed. In-and-in breeding, and the occasional rule of an incompetent or prejudiced Director, have prevented this admirable flock from equalling those which, sprung from the same sources, have been the property of private individuals. The prominent characteristics of the national flock may be shortly sketched as follows. They are of fair size, (though smaller than the best class of French Merinoes lately imported into this country,) with almost as much symmetry as the South Downs. The ewes, especially, are not much wrinkled, though well wooled on the face and legs. The fleece is fine and very close, but the staple is rather short, making the yield less than that of the before mentioned sheep. They are, on the whole, a very beautiful flock, but less imposing and superb than those of either Mons. Gilbert or Cugnot.

After a short chat with Mons. Pichat, and a hasty glance at the various portraits of sheep which form a regular and instructive series from the first introduction of the breed up to the present day, we took our leave, and drove back to our friend Mons. Cugnot, where a party of eighteen staunch Merino breeders sat down to dinner. It was a most agreeable finish to the day, and the *agricultural* "feast of reason and flow of soul," was most edifying! A roast leg of lamb, *French Merino* lamb! formed one of the dishes, and I must confess, prejudiced as I was against tasting any thing with *merino* in it, I found it excellent, and quite free from the *strong* flavor so commonly perceived in this breed. I mention this as a curious fact, and one which at present prices, is not likely to be much investigated in this country. But I think we may rank these sheep as possessing fair mutton properties. The next day was the great Sheep Fair at Rambouillet, an account of which I will leave till my next number. F. M. R. *Morris, Otsego Co., N. Y.*

Inquiries about Manures.

We often have inquiries whether long or short manure is best; whether straw plowed in is beneficial; whether chip-dirt is hurtful or advantageous, &c. General inquiries cannot always receive a general answer. For instance, we have known long manure, or that which was composed of much straw mixed with strongly fertilizing materials, prove actually injurious on light soils, and in dry seasons. On the contrary, we have known straw alone to prove highly beneficial on heavy and rather wet soils, by increasing the lightness and porosity, and facilitating drainage.

To prevent bad results on light land, all manure, but more especially that which is unfermented and mixed with straw, should be as much pulverized and mingled with the soil as possible. It should be first spread, and allowed to dry a few hours, the loss by evaporation being far less than the loss by want of pulverization. It can then be thoroughly torn to pieces by repeated harrowings, which will mix it thoroughly at the same time with the surface soil. When turned under by the plow, none of it will remain in lumps, and by being well intermixed, it will serve rather to preserve than to dissipate the moisture. The same treatment on heavy soils, will also have a beneficial result, by increasing the friability of the parts. In soils not over-supplied with vegetable matter, straw and chip-dirt become useful as soon as they decay; and in adhesive soils they are useful by lessening the tenacity and promoting drainage. But on light soils, they often prove hurtful, and most so in dry seasons.

Horticultural Department.

Strawberries at Rochester.

The exhibition of the Genesee Valley Horticultural Society, the early part of the present summer, furnished much of an interesting character to the strawberry cultarist. As a proof of the zeal which actuates some cultivators in testing new sorts, it need only be stated that R. G. Pardee, of Palmyra, presented about forty varieties, as a part of his collection in bearing. Several cultivators exhibited a dozen sorts or more each, most of them possessing high excellence. Ellwanger & Barry offered for examination, besides many others, seven of their new seedling varieties.[*] Some of these for size and productiveness stand high, and for those who prefer a mild flavor, which characterizes most of their seedlings, will be highly esteemed. Bissel & Hooker presented three new seedlings, which evidently possess much merit, and are well worthy of further trial. One was staminate and two pistillate. For the best sort, every one appeared to be decidedly in favor of *Burr's New Pine*, the two first premiums being awarded to this sort. Some of the committee declared they were satisfied they had at last found the worst flavored strawberry in existence,—the Lizzy Randolph,[†] a large showy sort from Flushing. These two they felt assured would constitute the head and the tail of any list that could be made out, but the precise intermediate places for other varieties, they could not exactly agree in assigning. They however agreed to recommend the following as worthy of cultivation:—

Besides Burr's New Pine, placed at the head of the list as the best and most valuable, was *Large Early Scarlet*, a valuable early sort, and the best staminate for fertilizing others; *Scarlet Melting*, remarkable for its productiveness and easy growth, but not of high flavor—and from its extreme softness, only fit for home use; *Rival Hudson*, the best late sort, excellent for preserving, and from its productiveness, valuable for market; *Crimson Cone* and *Hovey's Seedling*, whose characters are well known. These the fruit committee were inclined to regard as the best six varieties, taking all points into consideration, for the vicinity of Rochester.

Among other sorts exhibited, the Cushing was noticed as being a large and very showy sort, but not high flavored. One of the fruit committee, who disliked a high acid flavor, regarded it as a valuable fruit. It is, however, not a good bearer. Buist's Prize, although large and showy, was found to be of very moderate quality. Iowa and Cornucopia were poor. Among new sorts which appeared to possess fine flavor, were McAvoy's Superior, Ellwanger & Barry's Unique Scarlet, and Prince's Charlotte. British Queen was of good quality, but it is remarkable that this sort, which in England exceeds in size and productiveness any thing we can raise here, should be so comparatively small and quite unproductive here. Boston Pine would have been recommended as one of the six best sorts, had not several cultivators lost many of their plants of this sort, during last winter. Prince's Profuse Scarlet is a good berry, but not enough better than the Large Early Scarlet to entitle it to distinction, while, being a pistillate, it requires a fertilizer. Very fine specimens of Jenny's Seedling were exhibited, and this variety promises to be a fine and rather a productive sort.

It was observed as a singular circumstance, that nearly all the specimens of Hovey's Seedling, for different localities widely apart, were distinctly and conspicuously coxcombed—a very unusual thing for that variety in other seasons.

Select June Roses.

"Will you name a few of the best *June roses*, taking into view both form and color?" *A.* *Triomphe d' Abbeville*, a fine deep red, very double, with a small green center; *Bonne Genevieve*, a beautiful clear rose, less double, but of handsome form; *La Tourterelle*, a pale purple or dove color, with delicately imbricated petals *Roi de Prusse* and *London Pride*, light purple, of fine form, and very double, the latter the most so; *General Thiers*, very dark velvet purple, remarkable for the delicacy of its petals; *Victor Tracy*, of only moderate pretensions as to form, but a remarkably large richly colored rose, and an uncommonly vigorous grower; *George the Fourth*, very large, dark rich velvet, its only fault being its loose form; and among white roses, *Madame d'Arblay*, *Blanche Fleur*, *Hybrid Blanche* and *Madame Plantier*—Madame Hardy is a very fine white rose, but too tender for the north. The old *Crimson Boursalt* or Maheka, and the *Boursalt Elegans*, (very often spurious,) are fine for pillars, as are also the Prarie roses, the *Baltimore Belle*, *Queen of the Prairies*, *Perpetual Pink*, &c. We should not forget in this list, the old *Blush Moss*, which in some points has never been equalled by any of the new mosses, and *Princess Adelaide*, perhaps the finest grower of all the moss roses, and very fine in other respects.

National Garden.

The *Jardin des Plantes*, or national garden at Paris, costs annually, according to the foreign letters of P. Barry, about $100,000 for its entire support. It contains in a growing state, arranged and labelled, all the best new and old *kitchen vegetables*, where market gardeners may come and learn their qualities; a great collection of *medicinal plants;* a complete assemblage of the *grasses;* an *arboretum* (of ornamental trees;) a beautifully cultivated *fruit garden;* a full green-house and hot-house department; a *menagerie* of everything from all parts of the world, from elephants to monkies; wild and domestic birds; the richest anatomical collection in Europe, comprises over 15,000 preparations; 60,000 specimens of minerals, and fifty thousand species of dried plants; a natural history library of some thirty thousand volumes; besides which there are experiments in all departments of horticulture constantly in progress, and gratuitous lectures delivered by the most eminent scientific men. Now the question naturally suggests itself,—which would be the greatest benefit, to the people of this country, such an institution as this, at $100,000 annually, or a *navy* costing yearly ONE HUNDRED TIMES this amount.

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[*] The Monroe Scarlet has excited much notice on some grounds this year—is a good and large berry, and an enormous bearer.

[†] Justice requires us to say of this fruit, however, that it is of the largest size, exceedingly showy, and a very great bearer.

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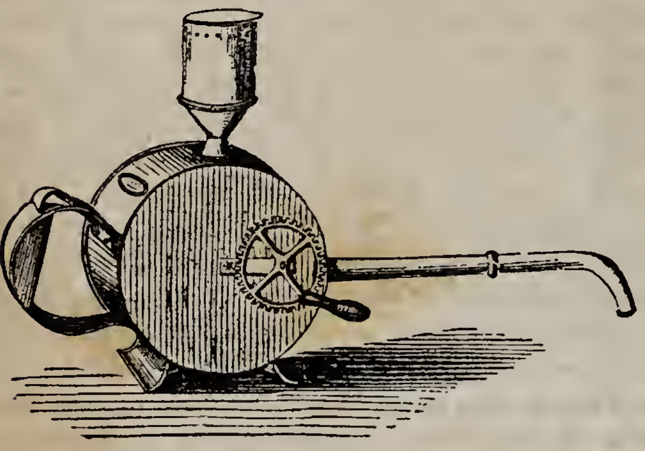
Brown's Fumigator for Destroying Insects.

An intelligent cultivator of fruit lately remarked, after alluding to the great improvements already made in the selection of fine varieties, "I am satisfied that in future the great campaign is to be with insects—they are increasing with the increase of cultivation." Experience is rapidly teaching us the truth of this remark; and hence every new and successful attempt to destroy them must be welcomed by all cultivators. The following description of a new machine for this purpose, is given in Hovey's Magazine, and operates in throwing out smoke very much on the same principle as the fanning mill. Delicate plants or shrubs may be covered for fumigation with an instrument resembling an umbrella with a long sharp staff, and from the outer border of which a curtain is suspended all around. This, when spread and stuck into the ground, completely encases the plant, and retains the fumes. We cannot but yet hope that the fumes of tobacco, sulphur, or some other fœtid poison may be made use of to repel the curculio.



The attacks of insects are yearly become so destructive and annoying that every means should be taken to prevent their increase. Latterly, many of those which a few years ago were perfect pests, have become less injurious from the timely discovery of that great agent for destroying insect life—whale oil soap. Without this our rose gardens would be complete specimens of devastation, so unconquerable is the slug by every foe, except oil soap.

But while soap is so destructive to many insects, and sulphur to others, there are some sorts which neither will harm, or, at least, there are some which are easier destroyed by other means, the principle of which is fumigation with tobacco. The aphis or green fly is invulnerable to sulphur, while a small stream of tobacco smoke will kill them off "in a whiff."

Many persons make objection to the use of whale oil soap, on account of its strong and disagreeable odor. To us, no oder, however bad, is so objectionable as a horde of insects preying on a beautiful plant. But to those who do dislike oil soap, fumigation will at once suggest itself as one of the best means of destroying many of the same insects for which soap is generally made use of. The only trouble has been how to apply the fumes of tobacco to plants and shrubs, especially those growing in the open air; this has always been attended with much trouble, but at last it has been in a great degree obviated by Brown's Patent Fumigator, of which we present an engraving above.

This is a new and improved instrument for effectually applying tobacco smoke to conservatories, greenhouses, frames, &c., and to plants in the open ground; also to dwelling houses, closets, cellars, aviaries, heneries, &c., where insects of various kinds are often very annoying, disagreeable or destructive.

It has been extensively used in England, and has been recommended by Mr. Paxton, Mr. Beck, Dr. Lindley, Mr. Glenny, Mr. Johnston, Mr. Wood, and other editors, gardeners, nurserymen and amateur cultivators. It has also been tried by amateurs and cultivators in the vicinity of Boston, and has been found to be well adapted to the purpose for which it was invented. The *thrips* and the *aphis*, two of the most destructive insects to grapes and roses, are killed immediately upon one good application of smoke. We are confident it will prove a valuable machine, and one which every gardener or amateur should always have at hand. An hour's application of the smoke will save hundreds of plants, trees, &c.

Formerly all the fumigating was done with a kind of bellows, hard to work, and not of sufficient capacity to fill a small house, or to throw out the smoke in such a cool, continuous stream. All the objections to the bellows are obviated in Brown's Fumigator.

The machine, as represented in the engraving, is made of tin, and is sufficiently light and portable to be used with ease. It consists of a circular box, on the top of which is a copper pot, movable, in which the tobacco is placed. The interior of the box is so contrived with fans, as, by turning the handle, to throw out through the tube on the opposite side, a full stream of perfectly cool smoke.

It should be worked as follows:—Fill the copper pot with tobacco, (leaf is the best,) placed in rather lightly; then, with a piece of lighted paper, ignite it: turn the handle immediately, rather fast at first, but very gently after the smoke appears freely at the mouth of the tube; when the tobacco is exhausted, with a damp cloth remove the pot and fill immediately, repeating the operation as long as may be required.

Amateurs, and especially ladies, to whom smoke is extremely disagreeable, can use the Fumigator without suffering any of the disagreeableness, and often nausea, arising from the use of tobacco, as applied in the ordinary way.

For fumigation in the open air, in the most effective way, an old cloth or sheet may be thrown over the bush, and the end of the tube applied at the bottom. The space will be immediately filled, and every insect destroyed.

We can highly recommend this Fumigator as one of the most useful machines to every cultivator. With one of these, no one need complain that their plants have suffered from the green fly.

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Black Knot on Plum Trees.

EDS. CULTIVATOR—The following course of treatment pursued by me with a knot on a plum tree, and by which I believe I have destroyed the disease, is communicated rather as a possible method, than as a certain cure. Last summer I noticed the excrescence, and at once cut off all the bark, to which the disease had extended; shortly afterwards it again made its appearance, farther up the limb, and again I cut it out, disliking very much to cut off the limb, as it constituted about one-sixth of the whole tree. It did not appear again until this spring, when it broke out at the extremities of the previously excised portion of the bark; the upper excrescence I again cut out, and proceeded to puncture the lower one with a sharp penknife point, at the same time cutting across the bark below this excrescence, to separate it from the healthy part of the bark. At several times since I punctured the excrescence, it growing out larger from the tree all the while, until yesterday, when on sticking my knife into it I found it was hollow. I then dug out the whole, and with it took out two grub-like looking worms, about three-eights of an inch in length, and am inclined to believe from the appearance of the wood under the wart or knot, that I have succeeded in removing the disease and its cause. The wood where the bark had previously been cut off, presents an appearance as if it had been perforated in very many places, and a continuous depression running in its length, as though a channel for the passage of the chief cause of the disease. L. V. W. *Albany, June* 17, 1852.

Destructive Caterpillars.

Our readers will perhaps remember a notice a year since, of a very destructive caterpillar in Onondaga and Cayuga counties, which defoliated entire orchards, and destroyed the apple crop. The following extract from a letter from Cayuga county, dated 6 mo. 19, 1852, furnishes some additional information. It will be remembered by those acquainted with this caterpillar, that it is distinguished by a row of spots along the center of the back, from the common orchard caterpillar, which has a single whitish line.

"The spotted-back caterpillars are in very diminished numbers this season. Last year people spoke of them *by the million*; and the fences, along which they travelled, were partially covered with them. This year very few appear to be changing their quarters, and the reason may be, there is food enough for all without that necessity. It is said they make a small web very early in the spring, which often escapes observation; and therefore I should think they must suffer much during late vernal frosts, and cold rains. Perhaps this is the reason why they are so scarce in some seasons, and abundant in others, while the common caterpillar remains much the same in regard to numbers. In 1834, however, when several inches of snow fell about the middle of the fifth month, [May.] very few of this troublesome insect survived; but in ordinary seasons, their web appears sufficient to protect them. I should like to hear the remarks of others in regard to the extent of country through which the *spotted-backs* ranged, and also in regard to their duration. Some have called them the *army worm*; but whether they are the same that ocasionlly ravages the western states, I have no means of ascertaining."

Varieties from a Single Species.

Striking instances of the vast number of varieties which may be produced from a single species, are furnished by the apple and pear, the former more particularly in its countless thousands, with all grades, from honied sweetness to sharp austerily, from nearly black in color to white; from the huge monstrous pippin to the little lady apple—and with almost endless degrees in texture, juiciness, astringency, form of tree and form of fruit, &c. But for the most wild and *unlike* variations in appearance, perhaps no plant furnishes anything equal to the *Brassica oleracea*, which, in its uncultivated state, is a little plant growing on the maratime cliffs of England, with smooth leaves, and a spindle shaped root. The varieties which this plant has produced by cultivation are well known to scientific gardeners, but it may be interesting to give the following *general* list, condensed from Kemp's recently published treatise on Agricultural Physiology:—

1. All borecoles or kails, at least a dozen sorts.
2. All cabbages. [White, Savoy, red, &c., with numerous sub-varieties.]
3. Brussel sprouts.
4. All cauliflowers and Broccolies. [Forming close heads of flower buds.]
5. The Rape plant.
6. The Sweedish turnep, with its vast number of sub-varieties.
7. The Kohl-rabi.

By descending to more minuteness, this list might be made to fill whole pages. To suppose a winter drum-head, and a ruta baga of equal size, originally sprang from the same little wild plant, would require a severe stretch of credulity, were not the fact most conclusively demonstrated. To the scientific observer, however, this apparantly wide distinction, does not appear nearly so great as the difference between those seemingly more similar plants, rye and barley. A head of bearded wheat and a head of rye may appear more nearly related than bearded and bald wheat; while the botanist sees in the former a wide generic separation, and in the latter but an accidental variation.

Horticultural Hints.

To preserve plum trees from black knots or excrescences, cut them off several times a year, *cut* and *keep cutting.*

To prevent the cherry crop from being spoiled by the curculio, *keep the ground from grass.*

The only remedy for the cherry bird, is shooting—hundreds have thus been driven away by a few hours labor, *so that one was not seen for a week.*

The best remedy for bugs on melons and squashes, is a cheap square box covered with guaze or netting.

To transplant evergreens, one point attended to will result in success—neglected, in failure—this is, *removing plenty of earth with the roots.*

Mulching and watering the raspberry on light soils will usually double the size of the fruit.

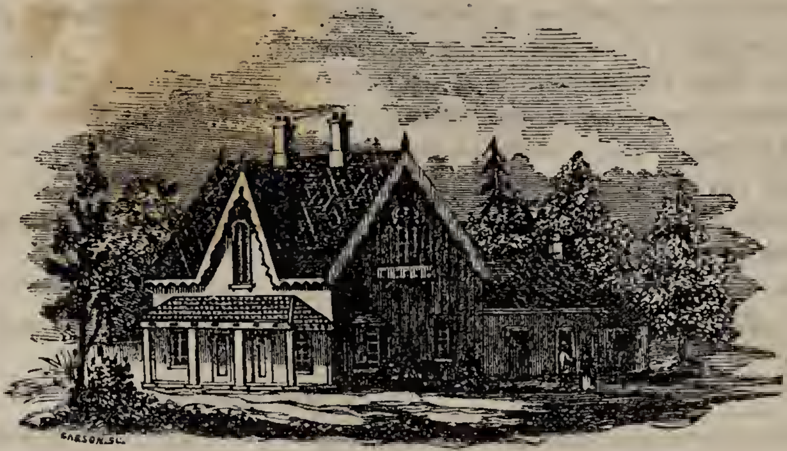
Banking round young trees a foot high in autumn, is an infallible remedy against mice.

Mulching young fruit trees is one of the best operations for this country, but the litter must be removed early in autumn, or the mice will play havoc.

Rapid Growth of Apple Trees.—The Massachusetts Ploughman gives the measurement of four apple trees set five years ago, when three years from the bud. The soil was of quite moderate fertility. Their present circumference one foot from the ground, is fifteen inches each. This rapid growth is owing to careful transplanting, mulching with strawy manure and peat, washing the stems with potash ley, and keeping the ground in good tillage.

Culture of the Dandelion.—We are informed in the Prairie Farmer, that a man who supplies the Boston market with this early vegetable, obtains annually from one-fourth of an acre, the sum of $200.

Wash for Barns.—The *Horticulturist* gives the following as the best for this purpose. Hydraulic cement, 1 peck; freshly slacked lime, 1 peck; yellow ochre (in powder) 4 lbs.; burnt umber, 4 lbs.; the whole to be "dissolved" in hot water, and applied with a brush.



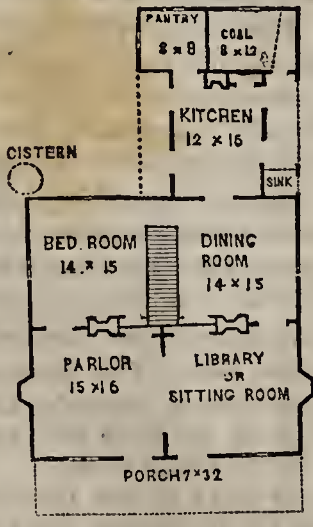
Plan of a House.

[No two men, scarcely, will build dwellings exactly alike in all particulars, and the diversity of plans which we are enabled occasionally to present our readers, cannot fail to suggest useful hints to some. The following possesses some decided excellencies; but we are sorry our correspondent found it necessary to find fault with another plan, to sustain what we cannot but regard some defective points of his own. Why cannot we have *every* desirable quality—brick filling—and double doors? Let the central portion of the veranda in the following plan, be converted into an entry, or vestibule, and a most objectionable feature is at once removed. We doubt not our correspondent will pardon the freedom of these hints.* Eds.]

Eds. Cultivator—I was highly pleased with J.'s remarks respecting country buildings, and also with his plan, yet I think that in order to render a house "warm and comfortable" in this climate, a good fire-place is more essential than a double coat of plastering, or a warm covering or filling in with brick. Now, if I understand his plan, there are no means of heating any of the bed-rooms, nor the library or sitting-room; this, by many, would be considered a very serious objection, worse even than having doors opening immediately into the rooms from the outside.

Enclosed is the plan of a country house, lately drawn for a friend who is about to build, and who wants a house with four rooms and a kitchen on the first floor, and one story high.

A house built on this plan, would be both comfortable and convenient, and at the same time, as ornamental as a farmer who did not wish to be thought "freakish," would like to build in western Pennsylvania, where you will frequently see *fire walls*, or perhaps a roof extending over the gable just far enough to cover a three-quarter inch "barge board," high grecian porticos, and chimneys invariably in the outside walls.

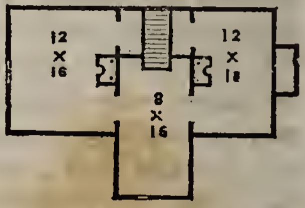


First Floor.

The main building will be 32 by 34 feet; the kitchen 12 by 16, with two porches 4 feet wide—the pantry and coal-house connected with the kitchen, will be 8 by 20 feet. There is a door opening out of the kitchen into the pantry, and from the porch into the coal-house.

The building will front the south-east, and from the bay window in the sitting-room, will be visible three-fourths of the farm; from the parlor bay will be seen part of the orchard and the shrubbery.

Each room is provided with one closet or wardrobe; the library with a permanent book-case. All the windows in the second story open on hinges; the one to the north-east into a small balcony with light iron railing, 4 by 6 feet, which is sheltered by the roof, projecting over the wall two feet. The window at the opposite end has a railing attached to the outer edge of the wall, three feet high. The lower story, besides the dining-room, library, and parlor, contains one large bed-room. The second has two good bed-rooms, 12 by 16 feet, and if necessary, a bed could be placed in the middle room, which is 8 by 16 feet, extending to the front wall. The stories are each 10 feet high. The stairs ascend between the chamber and dining-room; the cellar stairs are under them. Every room except the middle one in the second story, is provided with a fire-place. The roof is steep, the apex being 16 feet from the second floor; this leaves room for a high ceiling in the upper bed-rooms, and for a small ventilating window at each end, above the ceiling, which permits a free circulation of air between the plastering and roof.



Second Floor.

If you, or any of the readers of the Cultivator, can suggest any improvements on the above plan, before the building is commenced this summer, I will be glad to receive them. A. D. C. *Temperanceville, March,* 1852.

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Bruising Apples.—The Working Farmer says, in speaking of the great success of R. L. Pell, and the high prices he gets in foreign markets, "Mr. Pell has occasionally made a thumb-dent in an apple, and after tying a label to the stem, placed the apple so dented in the center of a barrel of sound apples, requesting his agent in England to report the result. The report has always been, that more than half of such apples have been found decayed." How absurd, then, to club or shake apples from a tree, or even to tumble them by basketfuls, when hand-picked, into barrels.

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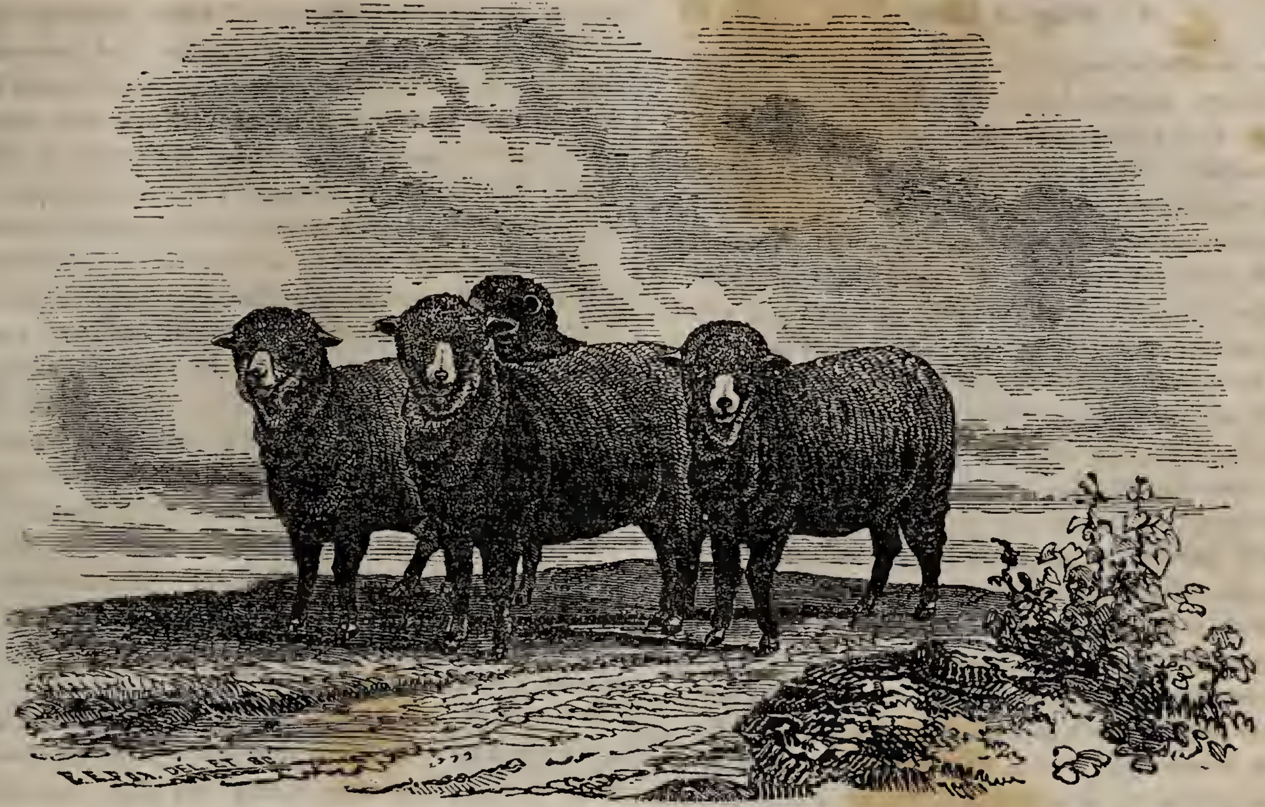
* We have taken the liberty to give a perspective view, instead of the two elevations of our correspondent.



Silesian Merino Sheep.

Eds. Cultivator—I send you a cut of a group of Silesian Merino Ewes, which represents them exactly in the same position that they were taken from a daguerreotype view, as they were standing in an open yard; consequently they do not show all of their good points—still enough are seen to enable one to judge of the character of the sheep. Wm. R. Sanford, Esq., of Orwell, Vt., with whom I traveled through France, Spain, and the German states, for the purpose of procuring Merino sheep, gave a cut of one from this flock, which was published in the July number of the Cultivator, 1851.

The original stock of these sheep were from Spain in 1811, and since that time have been the property of a Silesian gentleman, who possessed all the necessary qualifications for a successful sheep breeder. They are about medium size, well formed, and have every appearance of being a hardy animal, often attaining a great age, one of which lived to be 21 years old.

The superiority of these sheep over other Merinos, is in the fleece, which, as to quality, will compare well with many Saxon flocks. It is very thick, remarkably so on the belly and legs, and as to evenness of fleece they have no rivals.

The length of staple is somewhat shorter than many other Merinos, and yet they yield a heavy fleece. Their wool is crimpy, and has a sufficient quantity of clear white oil to form a dark surface, which is beneficial to the wool, and partly protects them from storms. These sheep, I feel confident, will prove very acceptable to those farmers who wish to grow a fine grade of wool and a heavy fleece.

It is supposed by a large portion of wool growers of the country, that in proportion as the wool grows finer, the fleece becomes lighter. But I have long been of a different opinion, and my experience for the last few years has led me to believe that, as much at least of fine wool can be grown from the same amount of keeping as that of the coarser grades. I have no hesitancy in saying that one hundred or one thousand pounds of *fine Merino* wool can be produced at a less cost than an equal amount of any inferior quality.

These sheep cross well with the common Merinos of the country. In several instances, where I let the use of bucks, in flocks that are smooth skinned, the lambs from the Silesian rams were wrinkled from their ears to the end of their tails, and will no doubt add much to the quantity as well as to the quality of the wool.

Last year our Silesian ewes sheared an average of 7 lbs. 10 oz. in the dirt, of only 10 months growth. This year, in order to more thoroughly test their true value, I have been induced to wash them. They were first well soaked, then after standing in the sun an hour or more, were taken into the water, under a spout having a good fall, and washed until the dark ends disappeared, and the water run from the wool looking perfectly clear. After suckling lambs from January to May, which would lessen the fleece from one to two pounds each, and cleansing in the above manner, they gave an average of 4 lbs. 5½ oz. per head.

Our bucks of this variety, sheared last year from 7½ to 10½ lbs. per head. This year they have not been shorn.

I hope that other wool growers will express their views on the subject, through the columns of the Cultivator. If fine wool can be produced at the same cost as that of a coarse quality, I am sure that every one would prefer to grow it. Geo. Campbell. *West Westminster, Vt., July* 5, 1852.

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Corn and Weeds.—A correspondent of the Michigan Farmer allowed the weeds to have as good a chance at his manure and rich land, as his corn, consequently he had only 40 bushels of *ears* to the acre. Next year he plowed well, and kept the weeds down by diligent cultivation, and had 53 bushels of *shelled corn* from his yellow eight-rowed, and 70 bushels from his dent corn, per acre.

Norman Horses.

Eds. Cultivator—I was much gratified with a communication in your April number, over the signature "F. M. R.," giving some notes of a tour made in France last summer. The portion which particularly attracted my attention, was his notice of the "Percheron" breed of Norman horses, corresponding, as it does, in every particular, with the communications which I have made on the same subject in your valuable Journal, and several other agricultural papers. The identity of the conclusions he arrives at, with my own, in regard to the value of this animal to cross upon our lighter races, is more gratifying from the fact that he does not appear to be aware that this breed of horses has been introduced into our country. That Mr. R. has not seen my articles, I am well satisfied, or he would have made some allusion to my importations. Any man having a knowledge of the good points and qualities of a horse, and enjoying the opportunity of *cross-country* travelling in Normandy, (the only way these horses can be seen to perfection) *must* inevitably arrive at the same conclusions. I have seen in Normandy, similar performances to that of the grey he alludes to, as having carried him, with an another person 14 miles within the hour, before a heavy cabriolet—this vehicle, I think I am safe in saying, is full as heavy as our ordinary four-wheeled Jersey wagons for two horses; it only confirms what I have constantly advanced, that these horses will break down any other breed, more especially the thorough-bred, *in rapid travelling before heavy loads*, and that to an extent to which no one can be aware who has not repeatedly seen their performances. His idea in regard to the cross of the Morgan horse, is undoubtedly correct, and I am only astonished that the breeders of Morgan horses appear to regard this assumption as a stain upon the escutchion of their favorite breed, whereas I do not hesitate to assert that it is *the point* which gives all its value to the breed. That a similar breed, of larger size and superior qualities, will some day spring from the importation of the Percheron, I have not the slightest doubt. "Diligence," now 16 years old, is still as lively as a colt, and in successful practice at his favorite stand in Pennsylvania; he has long since paid all the expenses of the cost and importation of himself and six others, besides having my farm constantly worked by themselves and their progeny, since 1839. Yours very sincerely. Edward Harris. *Moorestown, N. J., June* 17, 1852.

Retention of Manure by the Soil.

It is not an uncommon opinion that under-drains convey off the enriching and soluble portions of manures, dissolved and carried down by rains. On this subject, Prof. Mapes makes the following remarks, which as applicable to all ordinary cases, are strictly just:—"To suppose that manures in a state of solution will be washed from the mouths of under-drains, is an error—for it is impossible to filter downward in the fluid form, through any fertile soil. Even the brown liquor of the barn-yard will have all its available constituents abstracted by the soil, before it descends into the earth thirty-four inches. If this were not true, our wells would have long since become useless, the earth's surface would have become barren, and the raw materials of which plants are made, which now occupy the earth's surface and surrounding atmosphere, would have passed towards the earth's center; but the carbon and alumina of the soil, each of which has the power of absorbing and retaining the necessary food of plants, are agents for carrying into effect the laws of nature for the protection of vegetable growth."

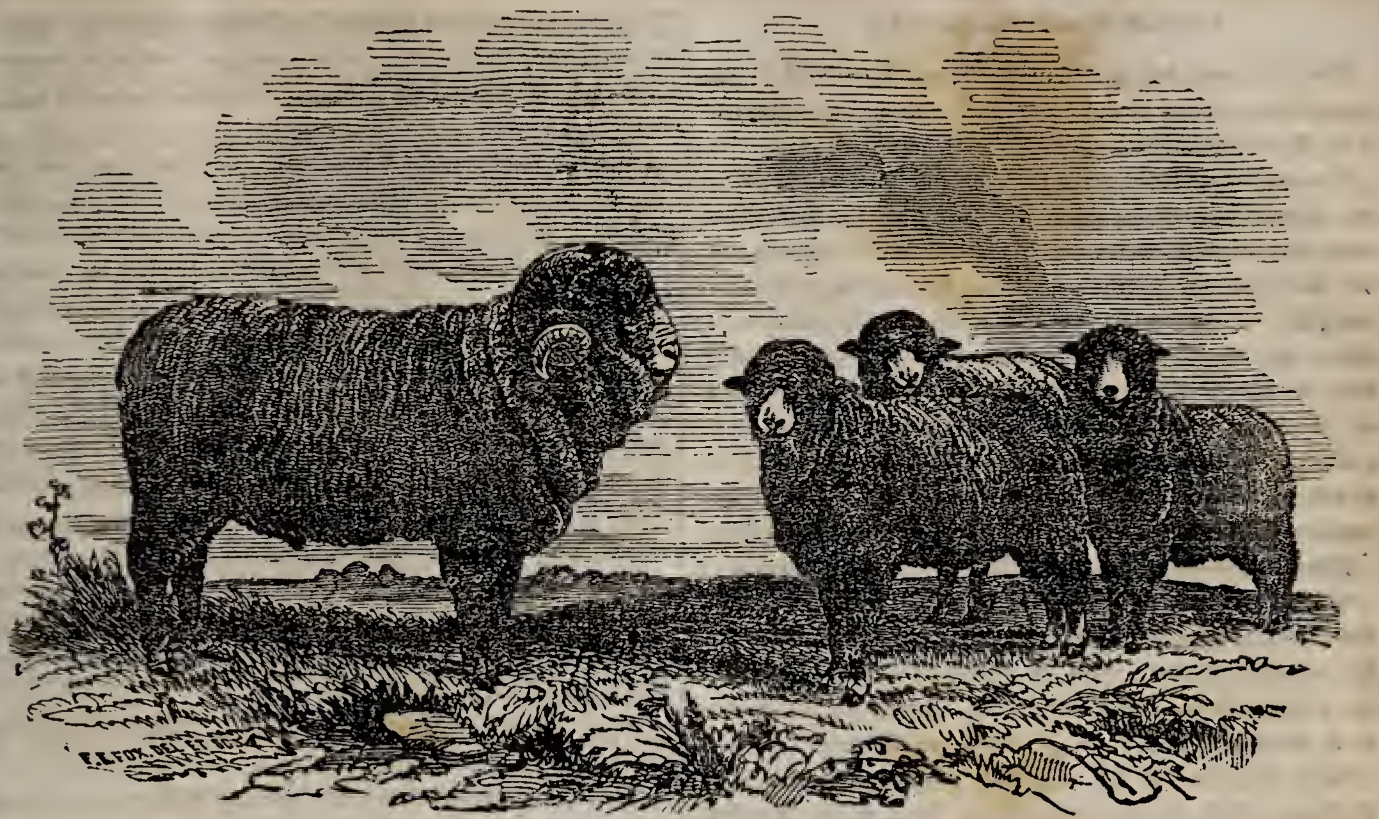
The power of the soil to absorb manure, of which ammonia may be regarded as a chief constituent, is of course limited—but it doubtless exceeds all ordinary cases in practice. Prof. Way found that by filtering a portion of putrid drainage water through a few inches of soil, it had lost all bad odor, and contained no longer any ammonia; but he also found that by filtering fresh liquids of this sort, which had not yet begun to putrify, through such a layer of soil, they even lost all tendency to putrify." His experiments also prove that the soil has a power of absorbing potash, soda, magnesia, and phosphoric acid, as well as ammonia—and these with lime form the chief elements of manure.

The quantity of muriate of ammonia, absorbed by the soil was found to be about one grain in one hundred and fifty—the ammonia constituting less than one-third of this salt. If therefore, the average quantity of ammonia in yard manure is one two-hundredth part, then the amount of manure which may be applied to land, if plowed nine inches deep and thoroughly intermixed, before the soil is saturated with ammonia, is no less than two-fifths of the whole bulk of the soil, or about five hundred loads per acre. The same fact will also show that to prevent completely any danger of loss from compost heaps, the amount of soil, or similar absorbent, should be more than twice that of the yard manure used in mixture. As the absorbing power is chiefly owing to the clay it contains, it will be understood that heavy soils will retain more manure, when very copiously applied, than those of a lighter character.

The theory of the value of gypsum depending on its absorption of ammonia from dew and rain, retains but a slender hold on probability, when it is remembered that four pounds of rain water never contain more than one grain of ammonia—and that all the ammonia that falls in our heaviest storms would be absorbed by a layer or film of soil ten times thinner than the finest bank-note paper.

The Horse-Racket.

Every boy knows, perhaps, what a snow-shoe is—that is, one with very broad soles of wood, to enable him to walk without breaking through, on a slightly crusted snow. A similar contrivance to enable horses to travel upon bog-meadows, in plowing, harrowing, carting, sledding, &c., may be new to most of our readers. Its construction is thus described by Wm. H. Howard, in the Granite Farmer. "They are nine inches long and eight wide, with a hole in the center the size of the bottom of the horse's foot, with a bar of iron across the bottom of the hole, about three-fourths of an inch wide and the fourth of an inch thick, on which his foot rests; also four leather loops, equi-distant, through which to pass a strap, and buckle around the fetlock joint." These, we are informed, admit the horse to tread safely where the mud is deep.



Mr. Campbell's French Merino Sheep.

(See Cultivator for July, page 251.)

Sheep and Wool in the United States.

The superintendent of the census has furnished the National Intelligencer with the following tabular view of the number of sheep in each State and Territory in 1850, as returned by the census taken in that year, and also the number of pounds of wool clipped in each State and Territory, according to the same returns. To this we have added a column showing the amount of wool per head, in pounds, ounces and hundredths of ounces in each state:

			Wool to each Sheep.	
States.	*Sheep.*	*Lbs. of wool.*	*lbs.*	*oz.*
Maine,....	440,943	1,362,986	3	1.48
New-Hampshire,....	384,757	1,108,476	2	14.80
Vermont, ...	919,992	3,410,993	3	11.32
Massachusetts, ...	188,651	585,136	3	1.60
Rhode-Island,.......	44,296	120,692	2	11.20
Connecticut,.........	174,181	497,451	2	13.76
New-York,..... ...	3,454,241	10,070,301	2	14.56
New Jersey,..... ..	160,488	375,396	2	5.40
Pennsylvania,.......	1,822,357	4,481,570	2	7.31
Delaware,..........	27,503	57,768	2	1.60
Maryland...........	177,902	480,229	2	10.04
Dist. of Col.,........	150	525	3	8.00
Virginia, ...	1,311,004	2,860,765	2	3.08
N. Carolina, ...	595,249	970,738	1	10.08
S. Carolina, ...	281,754	467,223	1	11.20
Georgia,............	560,435	990,019	1	9.28
Florida,.............	23,311	23,247	-	15.95
Alabama,....	371,800	657,118	1	12.16
Mississippi,..........	304,929	559,619	1	13.28
Louisiana,...........	110,333	109,897	-	15.94
Texas,..............	99.098	131.384	1	5.12
Arkansas,.	91,256	182.595	2	0.01
Tennessee,..........	811,587	1,361.378	1	10.72
Kentucky, ...	1,070,303	2,283.685	2	2.16
Ohio................	3,937.096	10,111.288	2	8.96
Michigan,...........	746.435	2,043,283	2	11.68
Indiana, ...	1,122,493	2,610.287	2	3.60
Illinois, ...	894,043	2,150,113	2	6.48
Missouri,............	756,399	1,615.898	2	2.16
Iowa,...............	149,960	373,898	2	7.81
Wisconsin,..........	124,892	263.963	2	1.92
California, ...	17,574	5,420	-	5.02
Minnesota Ter.,.....	80	95	1	3.00
Oregon do	15,382	29,686	1	14.88
Utah do	3,262	8,222	2	8.32
New Mexico, ...	377,271	32,901	-	1.47
Total,........	21,571,306	52,417,287	Average,...2	6.86

Ten Reasons for Under-draining.

1. It prevents water which falls from resting on or near the surface, and renders the soil dry enough to be worked or plowed at all times.

2. By rendering the soil porous or spongy, it takes in water without flooding in time of rain, and gives it off again gradually in time of drouth.

3. By preventing adhesion and assisting pulverization, it allows the roots to pass freely through all parts of the soil.

4. By facilitating the mixture of manure through the pulverized portions, it greatly increases its value and effect.

5. It allows water falling on the surface to pass downward, carrying with it any fertilizing substances, (as carbonic acid and ammonia,) until they are arrested by the absorption of the soil.

6. It abstracts in a similar manner the heat contained in falling rains, thus warming the soil, the water discharged by drain-mouths being many degrees colder than ordinary rains.

7. The increased porosity of the soil renders it a more perfect non-conductor of heat, and the roots of plants are less injured by freezing in winter.

8. The same cause admits the entrance of air, facilitating the decomposition of enriching portions of the soil.

9. By admitting early plowing, crops may be sown early, and an increased amount reaped in consequence.

10. It economizes labor, by allowing the work to go on at all times, without interruption from surplus water in spring, or from a hard baked soil in summer.

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Oil Cake.—Experiments prove that *weight for weight*, the cake which is left after the oil is pressed out of the linseed, is more fatting than the linseed itself.

United States Ag. Society.

The National Ag. Convention, the call for which was noticed in our last no., met at the Smithsonian Institution, Washington city, on the 24th June.

There were present at the organization 151 delegates, viz: From New-Hampshire, 8; Vermont, 3; Massachusetts, 25; Rhode Island, 3; Connecticut, 4; New-York, 20; New-Jersey, 2; Pennsylvania, 5; Delaware, 6; Maland, 23; Virginia, 10; North Carolina, 1; Louisiana, 2; Ohio, 12; Kentucky, 2; Tennessee, 3; Indiana, 1; Illinois, 2; Arkansas, 1; Michigan, 4; Texas, 1; Wisconsin, 2; District of Columbia, 11.

Judge Frederick Watts, of Pennsylvania, was appointed temporary chairman, and the Convention was permanently organized by the choice of the following officers:

PRESIDRNT—Marshall P. Wilder, of Massachusetts.

VICE-PRESIDENTS—Henry Wager, of New-York; Frederick Watts, of Penn.; Wm. F. Hunter, Ohio; Chas. B. Calvert, of Md.; Geo. W. Nesmith, of N. H.; Jno. A. Throckmorton, of Va.; H. K. Burgwyn, of N. C.; T. J. Rusk, of Texas; J. D. Doty, of Wisconsin.

SECRETARIES—B. P. Johnson, New-York; William S. King, of R. I.; J. B. De Bow, La.; J. A. Warder, Ohio.

A business committee, consisting of one from each State and Territory, was appointed, who subsequently reported a constitution for a National Association, which, after discussion and amendment, was adopted, as follows:

CONSTITUTION.

Sec. 1—The name of this association shall be "The United States Agricultural Society."

MEMBERS—DUES.

Sec. 2—The society shall consist of all such persons as shall signify to any officer of the society a wish to become a member, and who shall pay two dollars to the treasurer of the society, and a like sum annually hereafter, of delegates from the State agricultural societies in the States and Territories and District of Columbia, who may be appointed to attend the annual and other meetings of the society, and who shall pay the like sum, and also of such honorary members as the society may see fit to elect. Each member shall be entitled to receive a journal or publication of said society, containing an account of its proceedings and such additional matter as shall be deemed worthy of publication, free from any expense except postage. Twenty-five dollars shall entitle any one to the privileges of life membership and exempt him from any annual taxation.

OFFICERS.

Sec. 3—The officers of this society shall be a President, a Vice-President from each State and Territory in the Union, and from the District of Columbia, a Treasurer, a Corresponding Secretary, a Recording Secretary, and a Board of Agriculture, to consist of three members from each State, Territory, and the district of Columbia, to be appointed by the Executive Committee of the societies of such States, Territories, &c., and where there be no such State societies, to be appointed by the Executive Committee of this society. The President of the society shall be, *ex officio*, a member and President of this board and of the Executive Committee.

DUTIES OF OFFICERS.

The President shall have a general superintendence of all the affairs of the society. In case of his death or inability to discharge the functions of this office, the Board of Agriculture shall select a Vice-President to act in his stead, and clothed with the same power, and shall perform the same duties as the President until the next annual election.

Vice-Presidents—It shall be their duty to advance all the objects of the association, in their several districts; to explain to agriculturists the character and objects of this association, and endeavor to obtain their co-operation and support; to watch the advance of practical agriculture, and to make known the results of the same, by report or otherwise, from year to year.

Board of Agriculture—It shall be the duty of this Board to watch the interests of agriculture, as they are or may be affected by the legislation of the country, and to make such reports, memorials and recommendations as may advance the cause of agriculture, and to promote and diffuse agricultural knowledge; to examine, and when necessary, report upon the practicability of establishing agricultural schools, colleges, and model farms; to set forth the advantages of agricultural and geological surveys, and to show the importance of the application of science to agriculture; to represent through their reports the relation of our agriculture to that of foreign countries, and to endeavor to obtain information from such countries; to point out the advantage of introducing any new staples, seeds, and plants; to obtain, so far as practicable, annual statistical returns of the condition of agriculture throughout the different States—all which information shall be published by said society, and form part of its transactions.

The Executive Committee shall transact the general business of the society; it shall consist of five persons, who shall designate the time and place for exhibitions, regulate the expenditures, and take such supervisory charge of the business of the society as may best promote its interests. This body shall elect its own chairman. Three members shall constitute a quorum.

Treasurer—The Treasurer shall keep an account of all moneys, and shall pay bills only after they have been audited by the Corresponding and Recording Secretaries, and a member of the Executive Committee, and countersigned by the President ol the Society or the Chairman of the Executive Committee.

Cor. Secretary—The duty of this officer shall be to correspond with persons interested in agriculture; at each stated meeting he shall read such portions of his correspondence as may be of general interest; and it shall be his duty to carry out and advocate the views of the Board of Agriculture in obtaining, arranging, and publishing any information they may desire to have laid before the agricultural community.

The Rec. Secretary shall keep a record of the minutes of the society, and of its Executive Committee.

Sec. 4.—The annual meetings of the society shall be held at the city of Washington, on the first Wednesday of February, in each year, when all the officers of the society for the ensuing year shall be elected by ballot. The Executive Committee shall be competent, with the approbation of the society, to appoint occasional meetings, to be held at other points. Fifteen members shall constitute a quorum for business.

Sec. 5.—This constitution may be altered at any annual meeting, by a vote of two-thirds of the members in attendance, provided not less than fifty be present.

The following officers were then elected:—

PRESIDENT—Marshall P. Wilder, of Massachusetts.

VICE-PRESIDENTS—Ezekiel Holmes, Maine; George W. Nesmith, New-Hampshire; Henry Stevens, Barnet, Vt.; B. V. French, Mass; Josiah Chapin, R. I.; S. D. Hubbard, Conn.; Henry Wager, N. Y.; Thomas Hancock, N. J.; Frederick Watts, Penn.; Peter W. Causey, Del.; W. D. Bowie, Md.; George W. P. Custis, Va.; H. K. Burgwyn, N. C.; John Witherspoon, S. C.; Thomas Stocks, Ga.; R. Jones, Ala.; Alex. H. Bequees, Miss.; A. B. Roman, La.; F. Kinsman, Ohio; R. Mallory, Kentucky; Dr. John Shelby, Tennessee; John L. Robinson, Ia.; S. A. Douglass, Ill.; David R. Atchinson, Missouri: T. B. Flurnoy, Ark.; James L. Congar, Mich.; Dr. Simmons Baker, Florida; T. A. Rusk, Texas; W. F. Coolbaugh, Iowa; James D. Doty, Wis.; Kilburn W. Boggs, Cal.; J. F. Callan, Dist. of Columbia; S. M. Baird, New-Mexico; Alex. Ramsay, Minnesota; Joseph Lane, Oregon; Joseph L. Hayes, Utah.

EXECUTIVE COMMITTEE—C. B. Calvert, Md.; J. A. King, N. Y.; Dr. A. L. Elwyn, Pa.; W. B. Newton, Va.; J. D. Weston, Wis.

CORRESPONDING SECRETARY—Daniel Lee.

RECORDING SECRETARY—Robert C. Walker.

TREASURER—William Selden.

The business committee reported a resolution asking of Congress the establishment of a Bureau of Agriculture, which was discussed at great length by Messrs. Gentry, of Tenn; Douglass, of Illinois; Henry, of Washington; Holcomb, of Delaware, and others—some of the speakers preferring that the subject of Agriculture should be made a branch of the Smithsonian Institution, instead of an independent department of government. The resolution was finally so modified as to ask Congress to do what in its wisdom it should deem most expedient for the interests of Agriculture, and thus modified, was adopted.

Previous to adjournment, after a three days session, the delegates in a body, visited the President of the U. States. The President was addressed on the part of the delegates, by Col. Wilder, to which he made a brief and pertinent reply.

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APPLICATION OF GUANO.—C. M. Hovey, a skilful cultivator at Boston, who "finds a vast difference in favor of this manure over stable dung, costing twice the amount of the guano," has found much to depend on the season of its application. Most of the failures in our comparatively dry and hot climate, are the result of applying too late. He spreads it on the ground very early in the spring, so as to become thoroughly dissolved by the rains. A wet time should be chosen, and the surface of the earth disturbed, [by raking or harrowing,] so as to bury and mix it.

Exhibition of the Vermont State Ag. Society.

The annual exhibition of the Vermont State Agricultural Society, will be held at Rutland on the 1st, 2d, and 3d days of September, 1852.

An area of forty acres, of convenient access, near the village of Rutland, will be enclosed for the exhibition—embracing a pleasant grove, fresh running water, intervale and rolling sward land, and suitable structures for the accommodation of all, without charge, who wish to participate in the exhibition.

Persons honoring the Society with their presence on the occasion, will have opportunity for inspecting choice cattle of the various improved breeds; Suffolk and other valuable breeds of swine; large numbers, and unrivalled representatives of French Merino, German Merino, Spanish Merino, and Saxony sheep—and Vermont horses, in all their variety and excellence. For the purpose of showing the general action and carriage, and the speed of horses, a well graded trotting course, within the enclosure, will be prepared, and stated occasions will be designated for trials of action and speed.

A Mechanic's and Manufacturers' Hall, of ample dimensions, will be erected, in which all productions in those branches of industry may be advantageously shown. It is designed to give prominence to this part of the exhibition.

Works of art and of taste, household manufactures, and the like, will have a suitable place for display.

The Society will be addressed by **William S. King**, Esq., on the afternoon of the first day—by Hon. **William H. Seward**, on the afternoon of the second day, and by other gentlemen, at various times during the exhibition.

Arrangements have been made with all the railroads of the state, with the Saratoga & Washington, the Troy & Boston, and Ogdensburgh Railroad, and the Champlain Steamboat Company, by which passengers will be carried to and from the exhibition at one-half the usual price—and animals and articles free, at the risk of owners.

Extensive arrangements will be made at Rutland for the accommodation of visitors; and those who may fail to procure lodgings there, will be readily accommodated at the numerous stations on the lines of railroad centering at Rutland.

Gentlemen from the States and from the Canadas, are cordially invited to participate in the exhibition.

Communications may be addressed to J. A. **Beckwith**, Corresponing Secretary of the Vt. State Ag. Soc., Middlebury, Vt. **Frederick Holbrook**, Prest.

J. A. **Beckwith**, Sec'y.

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The Turnep Taste in Butter.

The Gardener's Chronicle furnishes an excellent article on the causes which effect the quality of milk and butter, and suggests chemical inquiry for ascertaining several unknown points. The "turnep taste" is suspected to arise from the cream being raised in an impure atmosphere, at too low a temperature, and is consequently a peculiar acidity of milk not yet satisfactorily investigated by chemistry. The facts adduced in proof are, that milk has the *turnep taste* whether cows get turneps, ruta-bagas, mangold wurzel, carrots, potatoes, or furze; and cases are related where dairy houses, subjected to foul air, rendered butter unfit for eating, although under the care of good dairy maids, in one of which all bad taste was removed at the first churning, by placing the milk in a clean room in the house, after the removal of the carpet, and in the other by draining the ponds which caused the bad air. Close stables and foul gas from the breath of cows and other causes, are supposed to contribute largely to a bad flavor.

We have fed ruta-bagas largely to milch cows, without producing a turnep taste, by means of the following precautions:—1. Good airy ventilation to building and yards. 2. Feeding after milking, (and it is said to be still better if directly after ruminating, but this we have not tried.) 3. Thorough cleanliness of vessels and dairy building. 4. Working out every particle of buttermilk as early as practicable, as it is in this that the objectionable flavor chiefly resides.

We cannot give full weight to the reasoning of the writer in the Gardener's Chronicle, although the causes therein specified, contribute very largely to the unfavorable result; to test this point further, let cows be fed with turneps at various times in autumn, while running at large in open pastures, and let the experiment be variously performed with and without the precautions named in the last paragraph above, and we have no doubt something important may be learned or established.

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Heavy Crop of Ruta Bagas.

John T. Andrews, of West Cornwall, Ct., furnishes the Genesee Farmer an account of his ruta baga crop, yielding at the rate of 1660 bushels, or 41½ tons per acre, and remarks that for much of the little he knows of farming, he is indebted to the Albany Cultivator, Genesee Farmer, and Working Farmer. His ruta baga land was a heavy soil, originally yielding but half a ton of hay per acre. Twenty loads of manure were applied per acre, but the resulting potato crop was a failure. The next year it was plowed and manured in a different style, as follows:—First, 12 inches deep, with 20 loads of manure; then, after a few weeks, 40 loads of manure and seven inches deep. It was then harrowed and plowed, and harrowed and plowed, till the manure was thoroughly mixed with the soil. Furrows, twenty-seven inches apart, were then strewed with a mixture of hen-manure, night-soil, ashes and gypsum. The furrows were then reversed, leaving ridges over this last manure. The crop was sown the 20th June—the weeds destroyed as soon as up—and the roots harvested 6th November. The leaves covered the whole ground when fully grown.

This may seem like a large application of manure, but a little calculation will show that 80 loads per acre, worked in a foot deep, form only an eighteenth part of the soil, and every load doubtless produced its full effect, and was not lost. Triple this amount of manure is often applied and worked into garden borders and beds, for raising melons, and vegetables, and a high degree of success usually follows such copious manuring.

There is no doubt that the large crop of roots was very much indebted to the thorough admixture of the manure and soil by means of the repeated plowings and harrowings; an operation even more indispensable on a heavy soil such as the one above named, than on one of a more friable texture, yet absolutely requisite to both. It is the neglect of this all-important part of good cultivation that has induced many to place the limit of profitable manuring much lower than the best practice would warrant.

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Indefinite Statements.

Half the value of agricultural papers is lost for want of accuracy in writers. An interesting statement of the use of spent tan-bark lately appeared in one of our best agricultural periodicals, in which we are informed, that a tanner made "a pile" of this material, mixed with "his refuse hair, horns, pieces of skin," &c., and by the addition of "a few dollars worth" of "some chemical substance" to induce fermentation, the whole was reduced to good manure. It was applied to five acres of sandy soil, so sterile "as hardly to produce a blade of grass," and in two years the field yielded, with ordinary cultivation, $250 worth of root crops.

Whether "the pile" contained a barrow load or a ship load—whether "his" refuse hair, &c., was ten pounds or ten tons, the accumulation of one week or of one year—we are not informed; neither can we know what material is meant by "some chemical substance," whether assafœtida, alcohol, sal ammonia, corrosive sublimate, or something else. Nor can we judge by any degree of shrewdness, whether the price was such that the "few dollars" would give us a pound or a ton.

Now, it requires about two hundred and fifty ordinary blades of grass to weigh an ounce; and supposing by a liberal allowance that "scarcely a blade" means ten blades, or the twenty-fifth part of an ounce, it was certainly a great achievement to increase this to two hundred and fifty dollars worth. But unfortunately we have no data for determining whether this was not wholly accomplished by the "horns, hair, and skin," which might have amounted to 30 tons, or largely by the assistance of the "chemical substance," which might have been three tons of lime, or three tons of sulphate of lime, or a few pounds of some more costly and powerful substance.

We advert to this subject merely to show the little value of statements whose basis is not accurate weighing or measuring.

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Connecticut State Ag. Society.

We see by the papers that a State Ag. Society was organized at New Haven on the 22d of June. The following is the list of officers chosen, viz:

Sam'l D. Hubbard, of Middletown, *President.*
C. H. Pond, Prest. N. Haven Co. Ag. Society.
Norman Porter, " Hartford Co. "
W. Alexander, " Windham Co. "
P. T. Barnum, " Fairfield Co. "
D.C. Whittlesey " Litchfield Co. "
Chas. B. Phelps " Grsenwoods "
Chas. Hubbard, " Middlesex Co. " *Vice-Presidents*
Cor. Secretary—Henry A. Dyer, of Brooklyn.
Rec. Secretary—Charles W. Ellion of New Haven.
Treasurer—Geo. Brinley, jr., Hartford.

Directors—James T. Pratt, Hartford county, Chas. Robinson, New Haven co., Asa Hubbard, Middlesex co., James M. Curtiss, Tolland co., T. S. Gold, Litchfield co., Chas. B. Ayer, N. London co., Thomas A. Mead, Fairfield co., George A. Payne, Windham co.

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Winter Barley.—A writer in the Genesee Farmer, in Indiana, states that he has raised this grain at the rate of 70 bushels per acre.

Inquiries about Poultry.

Eds. Cultivator—I have been a constant reader of your valuable work, the Cultivator, for the last eighteen months, but, in that time, I have not seen any statement of the profit of fowls when kept exclusively for eggs, with one exception. In the April number, 1851, Chester Moses says, "he keeps from 600 to 700, and they produce annually 100 eggs; each he also says they are allowed to range unconfined."

Now Mr. Editor, this is considerably below my idea of the general average of the number of eggs capable of being produced by one hen of the common variety, if confined to a reasonable space or plat of green pasture, say one acre, and fed with grain and all other things needful, with plenty of good running water.

Dr. J. C. Bennett, in his poultry book, page 206, says 200 is the average number annually. The question I wish to come at is, are both these statements correct, and is the difference accounted for in the different management, one flock running at large, and the other confined.

How much land in good pasture, should be given to an hundred hens, when they are allowed what grain they wish.

Are cocks necessary in a flock of hens, where eggs for the market is the only object? Who is right, Mr. Moses or Dr. Bennett?

About what is the average price of eggs in New-York annually? How many hens should be kept together for health when allowed any desirable quantity of pasture to range in?

If you would inform me in respect to the above inquiries through the medium of your very valuable paper, you will very much oblige me and others in this region of country.

I think of going into the above business extensively, if the information which I seek shall be favorable. I wish, however, to keep on the safe side of the speculation, and be well assured in respect to the matter before taking the first step.

We shall have, in a few months, a continuous line of railroad from this place, (Hudson,) to New-York, almost; and could send eggs to that market or Boston, very quick and safe. H. B. Chamberlain. *Hudson, Summit co., July*, 1852.

◆

Soaking Turnep Seed in Fish Oil.—Moore's New-Yorker furnishes a communication, showing how *two hundred dollars* were saved in one year, by means of an agricultural paper, which pointed out the remedy of fish oil against the turnep fly, and by which means a large crop was completely saved, while all others in the neighborhood were destroyed. The seed was soaked 48 hours, and then rolled in ashes.

◆

Value of Carrots.—J. W. Lincoln, of Mass., who has for many years used the carrot largely for feeding his domestic animals, including swine, and who has made some accurate experiments in connection therewith, is so thoroughly convinced of their value, that he has been in the practice of purchasing the surplus carrots of his neighbors, at nine dollars a ton.

ANSWERS TO INQUIRIES.

Wire Fences, &c.

Eds. Cultivator—I am desirous for information on several subjects, which I think will be interesting to many of your readers. I hope that you or some of your correspondents, will be kind enough to give answers to the following queries: Wire Fence—What size of wire is now considered best in respect to strength and durability? (1.) Might not the lower wires be smaller than the upper. What plan of making it is generally adopted as being best? (2.) Is wire for this purpose made in the U. States, and at what price per ton can it be had, and where? (3.) Weather Board—In cottage designs, published occasionally in the Cultivator, the weather-board appears to be put on perpendicularly, instead of horizontally, as formerly. Is the perpendicular better, or cheaper, or more durable? What width and thickness of plank, and how put on? (4.) C. M. *Sylva Grove, North Carolina, May* 10.

(1.) We have used No. 7 wire for the upper and lower wires, and No. 9 for the intermediate, where less strength from less exposure is required. If of the best telegraph wire, cattle cannot break them.

(2.) Figures and description of the mode of constructing wire fences were given in a late number of this journal.

(3.) We cannot give the desired information, except that we believe good wire for this purpose is kept at most of the principal agricultural warehouses in our cities.

(4.) Vertical weather boards, matched and battened, make not only a more durable siding, but being thicker and completely excluding the air, form a warmer covering from the cold of winter, as well as shut out the heat of summer. If nailed on the horizontal timbers of the building placed near each other, an inch and a fourth, or an inch and a half, are sufficiently thick. But if, as sometimes occurs in small buildings, or in wings of large ones, the only timbers are the plates and sills, they should be two inches thick, and need not be matched, but battened on the joints, both outside and inside. On the inner battens, the lathing is nailed. This constitutes a very substantial and good exterior covering for a house. The width is not essential, but should not exceed a foot, and should be uniform. The battens may not exceed an inch in thickness, nor three inches wide. All are put on with nails. Ed.

Loss of Plum Crops.

I should like to ask whether any of your numerous correspondents can give a cause why some very thrifty plum trees of different sorts blossom well, and when the fruit gets about half grown, they all fall off. They are perfectly clean and free from canker, and always have been. They are from six to eight years growth. Robert Sanford. *Clinton, Oneida co., N. Y., May* 15, 1852.

This is unquestionably caused by the sting of the curculio, the small beetle whose crescent-like marks on the surface of the young fruit, distinguish it from any other depredator. For a full description of its habits, and of the remedies, our correspondent is referred to any late standard work on fruits, and to former numbers and volumes of the Cultivator. Ed.

Garget in Cows.

Eds. Cultivator—In answer to further inquiries as to the Garget in milch cows, I can say that I have used the garget root, or pokeweed as it is commonly called, (Phytolacca decandra,) with success. A piece of the root as large as a kernel of corn, given with their food, cut fine, and fed twice a week, has always proved successful in two or three weeks. B. H. M. *Morris, N. Y., July* 12, 1852.

Domestic Thermometers.

Messrs. Editors—Will you please inform me whether there is such an instrument as a cream thermometer to be had. I wish one to try the cream in the churn before churning; I do not like the common thermometer, as it is too complicated and difficult to clean and subject to injury.

I have written to A. B. Allen of New-York, and he says he knows of no such thing.

I think it ought to be one with the scale marked on the tube, and so protected as to make it durable and easily cleaned.

If such an instrument could be had, I think it would soon come into general use, as it would emphatically be one of our labor saving instruments. C. H. Powell. *Poughkeepsie, May* 22, 1852.

We give the above inquiry an insertion, with the hope that it may attract the attention of some of our manufacturers, not knowing of any such instrument in market. For ordinary purposes, however, thermometer churns may obviate its necessity. Chemists, who find it necessary to determine frequently the temperature of liquids, some times employ a thermometer, the scale of which has a hinge joint just above the bulb, so as to be folded back or upwards, leaving the bulb entirely bare and exposed, whenever it is to be plunged into the liquid. Such an instrument would doubtless be frequently found quite convenient in various domestic operations, such as the management of milk, cream, the manufacture of cheese, butter, &c., and lead to the removal of much of the *guess work* which now so greatly retards accurate, skilful, and successful farming and home economy. Eds.

Instrument for Milking.

Eds. Cultivator—I take this method of applying to you for information concerning an article for milking cows. There is a "cow milker" for sale in New-York city, but I have not seen it recommended by any agricultural work. If you know anything concerning them, you will confer a favor on one of your readers, by informing him. D. *Middletown, N. Y., May* 26, 1852.

We do not know the nature or operation of the instrument referred to by our correspondent. If it consists of *tubes*, which are thrust into the orifice for the flow of the milk, and held there by gutta-percha cases, we would advise him to have nothing to do with it, as using it a few times so opens the orifice that the milk will run of its own accord and waste, whenever the bag becomes distended. We have known this method of withdrawing the milk to be used thirty years ago, and since, and always with this result. Ed.

Painting Tin Roofs.

In your July number, D. Tomlinson inquires respecting the use of paint on tin roofs. If the atmosphere is sufficiently dry to prevent rust, they do not require paint, as a painted tin roof will retain the heat, and cause the sleeping rooms in the attic to be much warmer than with the bright tin, on the principle of radiation. If the atmosphere is damp, to cause rust, the paint will adhere better after the tin is partially oxydized, than when painted on the smooth surface. Yours, S. G. Gilbert. *New-York, July* 9, 1852.

On this subject the Scientific American says:—It all depends upon the climate. In the interior of our country there is no necessity for painting tin roofs, but near the sea-board there is a positive necessity for so doing. In New-York, tin exposed to the rains and mists, without any paint or other covering, soon oxydizes—the iron soon appears through the tin. The reason why this is so, is owing to saline matter being brought from the ocean with our eastern winds. In the Island of Britain, where there is such a moist saline atmosphere, the farmers never feed salt to their cattle; but, at the same time, the farmers there cannot use tin for roofing—it rusts in a few days. In the interior of our country, where the atmosphere is free from saline matter, we have noticed that there was but little use in painting tin roofs. Observation is the only way to acquire correct information about such things. In our city it would be better if tin roofs were not painted for at least six months after they were put on. Tin, when new and handled by the roofers, is greasy, which prevents the paint (unless a great quantito of turpentine be used, which spoils it) from adhering to the tin, and it soon wears off. The exposure, before painting, also, serves to bite into the tin, and affords a good ground for the more intimate union of the paint with the metal.

Orchard Grass.

Eds. Cultivator—Your correspondent H. B. H., Bristolville, Ohio, asks in the July number of your journal, respecting the value of *Dactylis glomerata* (Orchard Grass.)

I have tried this, very thoroughly, for several years, and I shall never, with the utmost care in its extermination, recover entirely from its effects. I was led to use it from its reputation in doing well under trees. The difficulty is to make it come in *evenly*; the most careful sowing and the greatest quantity of seed will not produce a sod. It comes in sparsely and irregularly, in bunches or tufts; and as it matures earlier than either red clover, timothy, or red top, it must be cut before these grasses are ready, which prevents its being combined with them for hay fields.

The only manner in which I can conceive of its being used advantageously, is sown by itself at the rate of *one to two bushels* to the acre, and never allowed to seed, but cut two or three times a year for soiling. It is very early, and makes a strong nutricious, but not close or abundant pasture, and if allowed to seed, gradually overruns, in single spires or stools, one's whole place. My lawn is very much injured in this way, and the roots being stocky and long, they are difficult to destroy. My experience, and that of my neighbors, (whose fields have suffered from my seeds wafted over,) is very much opposed to it. It makes very coarse hay. H. W. S. *Fishkill Landing, July* 5, 1852.

Information Wanted.

Burning Lime for Agricultural Purposes.—I wish for information as to the best mode of burning lime for agricultural purposes. I want directions as to the method of building a kiln—the most durable material to build it of—also the difference between what is called a perpetual kiln, that is one in which a constant fire is kept. I will have to use wood for fuel. I wish to build a kiln that will hold say 1,000 bushels, and want to know the shape and dimensions. What is the cost per bushel for burning lime? Answers to the above, or any other questions in regard to lime, or the mode of applying it, will much oblige a seeker after improvements. Isaac A. Clark. *Marion, N. Y., June* 17, 1852.

Artesian Wells.—Where can I get a scientific and practical Artesian well borer? What is the expense of boring?

I have a well about 12 or 13 feet deep, and would like to bore for water in it, but do not know where to get an experienced man, or the tools, or the tube. If I could be successful in finding a bountiful supply of water, I have no doubt several of our neighbors would give employment to a successful man. The soil here is generally clayey or gravel. Elias A. Brown. *Minaville, Montgomery co., N. Y., July* 9, 1852.

Changing the Growth of Horns.—I have a yoke of valuable three year old steers. One horn of one of them, lops about three inches at the point below the level of the other. If you or any of your correspondents will inform me of any way that I can bring the horn up to a level with the other, without endangering the life of the horn, I shall feel very much obliged. N. W. Moore. *West Turin, Lewis co., N. Y.*

The use of unleached Ashes.—I have heretofore received a heavy addition to my crops of grass, in consequence of using unleached ashes, but am not satisfied whether the use of them does not tend to impoverish the land, and should be glad to have some one of more experience reply to such a question.

My method of using them has been to sow them on the old sward in the spring, at the rate of about 15 bushels to the acre—doing nothing more than to sow them as evenly as convenient with a shovel. I have used them on different soils, some of which has been gravelly and warm, and have received the greatest benefit when I have put them on a soil which is rather cold and heavy, having a little clay intermixed. D. G. W.

Fertility in Clover Roots. — R. W. Currier informs us in the Granite Farmer, that he has found by experience, that the roots of a good thickly sown crop of clover, by two years' rotting, is worth as much as 12 or 15 loads of manure.

Salt for Cattle.—The Prairie Farmer asserts from experience, that in the malarious region of the west, more disease may be prevented by salt among cattle, than by any other one thing.

NEW PUBLICATIONS.

The History of the Restoration of Monarchy in France, by A. De Lamartine. Vol. II., Harper & Brothers, New-York.

The first volume of this work has been for some time before the public, and has been read with avidity by lovers of the graphic style in which it is written. In vivid delineation of character, and life-like portraiture, Lamartine has few equals; but as a historian he lacks system. With the fervor of a poet, and the impetuosity of an enthusiast, he hurries the reader from one scene to another, to find just what he has previously advertised lay concealed there. As a whole, the work shows too much prejudice, and too little judgment—exhibits the power of "first impressions" to sway the reason and prevent that impartiality which the historian owes to his subject and the age.

London Labor and the London Poor, by Henry Mayhew. Harper & Brothers, New-York.

Part 19 of this publication is on our table. It places in its true light, the situation of the laboring classes in the great metropolis of the world. The statistics and information here presented, are fearful evidences of the wretchedness and want that prevails in crowded cities; and one wonders that where inducements to crime and vice are so great, so little actually comes to light.

Harpers' New Monthly Magazine. Harper & Brothers, New-York.

The July No. contains a beautifully illustrated description of the United States Armory, at Springfield, Mass., by Jacob Abbott. The article on Napoleon and Bleak House are continued. All the departments of this Magazine are well sustained, and do credit to the enterprising publishers, who are, by its agency, spreading far and wide a literature which will leave an impress on its thousands of readers.

A New System of French Grammar, containing the first part of the celebrated Grammar of Noel & Chapsal; by Sarah E. Saymore. Harper & Brothers, New-York.

The peculiarities of this Grammar are thus spoken of in the preface: "It has been found that by the help of this work, the teacher from France, with but an imperfect knowledge of the English Language, can give lessons with the most perfect accuracy, imparting the true pronunciation in a manner truly admirable and encouraging to the learner, while the English and American find a complete system of conversation, embracing every variety of idiom, in the peculiar and familiar style of conveying instruction in this most popular language of Europe."

Bleak House, by Charles Dickens. Harper & Brothers, New-York.

This work is being issued in numbers, in a neat and attractive style. It is not necessary to commend the writings of an author so widely and favorably known as Dickens. His stories have a moral—they are told with a purpose, and to some purpose. In common parlance, the last is always the best; consequently every one who has ever read Dickens, will read Bleak House.

The Works of Stephen Olin, D.D. L.L.D. Harper & Brothers, New-York.

The reading public, and more especially the religious part of it, are under obligations to the publishers for these volumes of sermons and sketches. They will be found full of thought, expressed in a clear and forcible manner, and particularly suggestive to the young mind.

Marco Paul's Voyages and Travels; by Jacob Abbott. Harper & Brothers, New-York.

These are a series of books written for children, in a pleasing style. They contain a great amount of geographical information, well set off by a variety of incidents and characters. The plates are finely executed, and add much to the value of the works. The following is the order of the series:

1. Adventures in New-York.
2. " on the Erie Canal.
3. " in Maine.
4. " in Vermont.
5. " in Boston.
6. " at Springfield Armory.

The above publications of Messrs. Harper & Brothers, are for sale by E. H. Pease & Co., of this city.

Littell's Living Age. E. Littell & Co., Boston.

We would not be deprived of the weekly visits of this excellent publication, for any consideration. The English periodical press excels our own in depth of thought and correctness of diction—its judgment is less impassioned and its opinion less hasty. Littell's Living Age republishes such articles from foreign publications as are best suited to American taste, and always serves its readers with viands which do not spring from our own soil. As a wholesome check upon the radicalism of the day; as a strong incentive to thought; as a means of information and education, this work stands foremost in its class.

Things in Albany County.

Eds. Cultivator—I have been thinking for some time that I would give you a short history of some matters in Albany county, as I have seen but little in relation to our affairs. Although we have been silent, yet we think we have some as good cattle and sheep as our sister counties; for an example, I bought, a little more than a year since, a French Merino buck lamb, which sheared for me 22½ pounds of wool, besides serving 104 ewes, from which I raised 108 lambs, and sold of this number 86 for $1,386. This shows conclusively that they must be pretty good. Again, I have just sheared a French Merino ewe, a little more than a year old, which sheared 22 pounds. The buck and ewe named, I shall probably exhibit at the State Fair.

I have a yoke of Devon twin oxen which have puzzled many a man to tell which was the largest, or which was the darkest colored, and finally to tell them apart in any way. The best judges in this county say they are the closest match that they have ever seen. These also will be exhibited at the state fair. Joseph C. Weeden.
Preston Hollow, July 3, 1852.

To Make Corn Starch.—The ripe grain must be mashed and ground to a fine meal, and then placed in a glazed mortar, and rubbed and triturated with a small quantity of water, until all the corneous particles are broken down. It is then to be transferred to a fine linen filter, washed, and expressed with successive portions of water. The liquid that passes through, must be allowed to stand for sixteen or twenty hours, for the sediment or starch to subside. The water is then to be drawn off and the residue dried in the usual manner.

This is the simplest and cheapest mode yet known for preparing the corn starch for pudding and other useful applications. E.

Breeding Stock.

Eds. Cultivator—I have been a reader of agricultural papers for many years, and frequently feel a desire to *shed ink* in the cause; but, by patiently waiting, have generally found my subjects ably treated by better pens. I dream of good cattle, and acknowledge receiving many a valuable hint on breeding, from the articles, with which the Cultivator, from time to time, has favored us, upon this subject. I was much interested, and have read and re-read the article in the May number, from the pen of Dr. Cleaveland, respecting "An influence affecting the purity of blood in stock." It is true much disappointment is often met with in breeding animals of good pedigree, but this is commonly traceable to other causes, than that assigned by the Doctor. How common it is, in looking over a herd, to have some particular excellence or defect pointed out, and traced to some remote progenitor. I have in my mind's eye now, a celebrated bull, the best I ever saw, for fullness of points and depth of pedigree, many of whose get, for color and marking, go back several generations, and some of them (the taint may be in the cows, of course) go —— nobody knows where, to an inferior cross evidently.

It is laid down as a rule, that "The mother's system is influenced and changed, by the young she carries in her womb, and if the male parent be of a different breed, her blood is contaminated, and she rendered similar to a mongrel for the remainder of her life."

This assertion would be startling if true; but that nature, in some of her freaks, should *occasionally* produce something which would warrant the above, is nothing strange. All females are more or less imaginative, and liable to mark their young.

The story of Jacob and his peeled rods, is familiar to all. A more modern instance is on record of a polled cow, which, while in heat, was with a red and white horned ox, and the same day was served by a red polled bull, both of pure blood; yet in due season she produced a red and white horned calf.

A breeder of Devons in this state, having pastured a lot of marked cattle with his cows, was constrained the next season to veal most of his *pure bred* calves, for they were badly marked with white. I remember reading of the mongrel Quagga colt several years ago; it was then supposed that the *imagination*, and not the *blood* of the dam was affected. I live in a neighborhood where Short-horn, Devon, and Polled cattle, are bred, and extensively crossed with the *native* breed—some using first one, then another; and in hundreds of instances of cows thus served, have not yet seen the first trace of the blood of a previous sire. I own a valuable bull, whose services are in good demand; now, if the Doctor's theory is true, how unwise are my friends to pay me $5.00 for calves from old cows, whose blood has been *contaminated* by inferior bulls. The most sanguine of our breeders can never hope to see the various pure breeds occupying the place of the common cattle of the country. The true course for farmers will be to send their best cows to well bred males. This course, steadily followed for a few years, will give us a stock, that for all practical purposes, except bull breeding, is fully equal to any imported; yet were not the above theory of contamination fallacious, how utterly futile would be such efforts at improvement. In conclusion, allow me to say, that I write not as one *having authority*, but as one who six days of the seven wears Thick Boots.

Exhibitions and Cattle Shows for 1852.

NATIONAL.

American Institute, New-York.—Exhibition opens at Castle Garden, Oct. 5. Cattle Show, Oct. 19, 20, 21.

American Pomological Congress.—Commences its session at Philadelphia, Sept. 13.

STATE.

New-York—At Utica,	September 7, 8, 9, 10
Ohio—At Cleveland,	Sept. 15, 16, 17
Michigan—At Detroit,	Sept. 22, 23, 24
Indiana—At Indianapolis,	Oct. 19
Pennsylvania—At Lancaster,	Oct. 20, 21, 22
Georgia—At Macon,	Oct. 19 to 23
Maryland—At Baltimore,	Oct. 26, 27, 28, 29
Wisconsin—At Milwaukie,	Oct. 6, 7, 8
Vermont—At Rutland,	Sept. 1, 2, 3
Rhode Island—At Providence,	Sept. 15, 16, 17

PROVINCIAL.

Canada West—At Toronto,	Sept. 21, 22, 23, 24
New-Brunswick—At Frederickton,	Oct. 5 to 9

COUNTY SHOWS—NEW-YORK.

Cayuga—Auburn,	Oct. 6, 7
Clinton—Keeseville,	Sept. 22, 23
Cortland—Cortland Village,	Sept. 15, 16
Dutchess—Washington Hollow,	Oct. 5, 6
Genesee—Bergen,	Oct. 6, 7
Greene—Cairo,	Sept. 21, 22
Herkimer—Herkimer,	Sept. 28, 29
Jefferson—Watertown,	Sept. 16, 17
Madison—Eaton,	Sept. 22, 23
Orange—Middletown,	Sept. 29, 30
Oswego—Fulton,	Sept. 29, 30
Otsego—Morris,	Sept. 22, 23
Putnam—Carmel,	Oct. 5, 6
Wayne—This county holds two fairs—one at Wolcot,	Sept. 21, 22
The other at Palmyra,	Sept. 28, 29
Saratoga—Mechanicsville,	Sept. 15, 16, 17
Rensselaer—Troy,	Sept. 22, 23, 24
Essex—――	Sept. 20, 21 22
Suffolk—Huntington,	Sept. 22
Seneca—Waterloo,	Oct. 14, 15
Monroe—Rochester,	Sept. 29, 30
Ontario—Canandaigua,	Sept. 29, 30

TOWN SOCIETIES.

East Bloomfield,	Oct. 5, 6
Cape Vincent,	Sept. 15

MASSACHUSETTS.

Berkshire—Pittsfield,	Oct. 6, 7
Essex—Lawrence,	Sept. 29, 30

CONNECTICUT.

Franklin—Greenfield,	Sept. 29, 30
Middlesex—Concord,	Oct. 6
Middlesex—Middletown,	Oct. 6, 7, 8

VERMONT.

Addison—Middlebury,	Oct. 6
Bennington—North Bennington,	Sept. 22, 23
Franklin—St. Albans,	Sept. 8, 0
Windham—Fayettville,	Sept. 15, 16

NEW-JERSEY.

Burlington—Mount Holly,	Oct. 6

PENNSYLVANIA.

Berks—Reading	Oct. 1
Bucks—Newtown,	Oct. 7, 8
Montgomery—Norristown,	
Philadelphia—Near Philadelphia,	Sept. 30, and Oct. 1
Susquehanna—Montrose,	Oct. 6
Northumberland—Northumberland,	Oct. 7, 8

OHIO.

Cuyahoga—Cleveland,	Oct. 6, 7

MICHIGAN.

Lenawee—Adrian,	Oct. 6, 7

Bees Robbing one another.—A correspondent of the Genesee Farmer says he has tried several ways to prevent bees robbing each other, and all have failed but this: He changes their position, putting one in the place of the other, and *vice versa*, by which means he has never failed to stop them in less than half an hour.

Fat Oxen.—The Prairie Farmer maintains that nearly all the fat cattle of this country, are greatly over-estimated in weight—and states that the *Rust ox* of Syracuse was estimated at 4,000 lbs., and actually weighed but 3,100 alive.

NOTES FOR THE MONTH.

Acknowledgments.—Communications have been received, since our last, from R. Watkins, J. G. Gilbert, Geo. Campbell, H. B. Chamberlin, E. A. Brown, F. Holbrook, H. Bird, Edmund Harris, Thick Boots, B. H. M., H. W. S., J. O. Phelps, E. L. Brown, J. C. Weeden, John T. Andrew, F. P. Dann.

Trial of Ag. Machines at Geneva.—As we are obliged to send this number to press before this trial takes place, which is to commence on the 20th, we can, of course, give no account of it until next month. It will be seen from the annexed list of entries, already made, and for which we are indebted to the Secretary, Mr. Johnson, that there is to be a spirited competition for the premiums. The judges will enter upon their labors with the full determination to make a thorough examination and trial of all the machines entered, and we cannot but anticipate the most important results to our farming interests, from their labors. The entries are as follows:

GRAIN REAPERS.

1. J. H. Manny, Waddam's Grove, Illinois, Manny's Patent Adjustable Reaper.
2. B. Densmore, Brockport, Self-Raking Reaper.
3. C. H. McCormick, Chicago, Virginia Reaper.
4. T. R. Hussey & Co., Auburn, Hussey's Reaper.
5. A. C. Powell, Syracuse, Rugg's Reaper.
6. Danford & Co., Geneva, Ill., Danford's Double Sickle Reaper.
7. A. J. Cook, Enon, Ohio.
8. T. D. Burrall, Geneva, Convertible Reaper.
9. Seymour & Morgan, Brockport, New-York Reaper.
10. Rapalje & Co., Rochester.
11. Aaron Palmer, Brockport, Self-Raking Reaper.

MOWING MACHINES.

1. Howard & Co , Buffalo, Ketchum's Mower.
2. T. Rush Spencer, Geneva, Bronson Murray's Mower.
3. C. H. McCormick, Illinois.
4. A. C. Powell, Syracuse, Rugg's Mower.
5. A. J. Cook, Ohio.
6. J. D. Burrall, Geneva.
7. J. H. Manny, Illinois.

HORSE POWERS.

Sweep or Lever principle

1. J. A. Pitts, Buffalo.
2. Eddy & Co., Union Village.
3. David Woodbury, Palmyra.

Endless Chain.

4. Emery & Co., Albany.
5. George Wistingham, Schoharie.
6. E. W. Badger, Fly Creek, Otsego.
7. J. A. Pitts, Buffalo.
8. J. Rapalje & Co., Rochester.

Iron Power.

9. John A. Pitts, Buffalo.

GRAIN DRILLS.

1. P. Seymour, East Bloomfield.
2. Henry Huffman, Macedon.
3. Rapalje & Co.. Rochester.
4. Foster, Jesup & Co., Palmyra.

SEED PLANTERS.

1. Emery & Co., Albany.
2. C. C. Van Every, Victor.
3. P. Seymour, East Bloomfield.
4. Rapalje & Co., Rochester.
5. Foster, Jesup & Co., Palmyra.
6. D. P. Daggett, Palmyra.

THRESHERS.

1. Emery & Co., Albany, Thresher and Separator.
2. Eddy & Co., do
3. J. A. Pitts, do
4. C. B. Salmon, Palmyra, do
5. D. Woodbury, Palmyra, do
6. Geo. Westingham, Schoharie. do
7. E. W. Badger, Fly Creek, do
8. Rapalje & Co., do

Sale of Devon Cattle.—The attention of the admirers of this valuable breed of cattle, is invited to the advertisement of Mr. Cowles, of Farmington, Conn.

Mr. Allen's Great Cattle Sale, it will be remembered, is to be held at the homestead farm of Gen. Van Rensselaer, on the Troy Road, about two miles above this city, on Wednesday the 18th of this month, when over one hundred head of blood stock will be offered, being the largest sale that has ever occurred in this country. We anticipate from Mr. Allen's reputation as a breeder, a large attendance from all parts of the country, and a spirited competition in bidding for this fine herd. Catalogues can be had at this office.

Mr. Vail's Sale of Thorough-bred Short-horns.—It will be seen by an advertisement in this number, that Geo. Vail Esq., of Troy, proposes to offer his entire herd of thorough bred Durham Cattle at public sale, in October next. His herd, it is well known, comprises some of the best blood in England, he having made several importations, both of bulls and cows, within the last ten years. While we sincerely regret that Mr. Vail has come to the conclusion to sell out his most valuable stock, and to retire from the field as a breeder, we congratulate the public upon the opportunity thus afforded them of procuring animals from this high bred herd. No one, we believe, has been more successful than Mr. Vail, as a breeder, as is shown by the high prices at which his stock has heretofore sold, and the sale now advertised cannot fail to attract the attention of those engaged in breeding, as well as farmers generally.

Drouth.—In this section of the state, and a great part of Vermont, crops are suffering severely from the drouth. Grass particularly, is very light, and will not cut half the average crop. A correspondent from Vermont says, "that cattle are being turned into many meadows in the southern part of the state." Unless farmers stir themselves immediately, there must be a great lack of fodder the coming winter. It is not, however, too late to raise turneps, or to sow corn and oats, to be cut green for fodder.

Conveying Manure in Liquids.—It is said that in Germany, some sixty-two square miles of soil has been made by simply driving muddy water, through earthern pipes, extended over a sand desert. The pipes are strong, and hard burnt, and cost less than half as much as iron pipes.

Connexion Between Roots and Leaves.—It is well known that the growth of roots depend on the leaves. J. C. Nesbit states in one of his lectures, "A friend of mine in Northamptonshire, cut two portions of a clover field at mid-summer; one was then fed close with sheep, the other grew. The former, (fed close,) yielded 35 cwt. of clover roots per acre—the other 75; showing the importance of a full growth for large roots, and for a good crop for manure."

Balky Horses.—It is said to be a first-rate way to treat balky horses, by hitching a good steady horse and team behind them—they will soon forget their peculiar propensities, and be glad for a chance to move the other way.

Willows.—We are informed that there are five million dollars worth of willows imported every year into this country, from France and Belgium, for baskets, &c., selling for $125 per ton. An acre of willow in England, ten years from planting, has been sold for $775. $1,000-000 are paid for willow baskets in New-York city.

Breaking Halters.—It is a serious fault for a horse to pull at his halter. An animal of this character was tied to a stake on the bank of a stream, with his tail towards the water. He snapped the halter, tumbled over the bank, floundered in the water to his heart's content, and afterwards was willing to remain *"at his post."*

The Water Cure Journal.

A NEW VOLUME commences with the present July number. Published monthly, illustrated with engravings, exhibiting the structure, anatomy, and physiology of the human body, with familiar instructions to learners. It is emphatically a Journal of Health, designed to be a complete Family Guide in all Diseases.

Terms.—Only One Dollar a Year, in Advance. Please address, post-paid, FOWLERS & WELLS, No. 131 Nassau street, New-York.

A few brief Editorial Notices may be acceptable to those unacquainted with this Journal. We copy:

From the New-York Tribune.

"The Water Cure Journal holds a high rank in the science of health; always ready, straight-forward, and plain spoken, it unfolds the law of our physical nature, without any pretensions to the technicalities of science, but in a form as attractive and refreshing as the sparkling element of which it treats."

From the Fountain Journal.

"Every man, woman, and child, who loves health, who desires happiness, its direct result, who wants to 'live while it does live,' 'live till he dies,' and really live, instead of being a mere walking corpse, should become at once a reader of this Journal, and practice its precepts.."

From the New-York Evening Post.

"*The Water Cure Journal.*—This is, unquestionably, the most popular Health Journal in the world."

This Hydropathic Journal now enters upon its Fourteenth Volume, with a circulation of *Fifty Thousand Copies.* The ablest medical writers are among its contributors, and all subjects relating to the Laws of Life, Health, and Happiness, may be found in its pages Now is the time to subscribe. August 1—2t.

FOR SALE.

A BULL 15 months old, bred by Fisher Sheafe, Esq., out of the fine Durham Cow Red Rose, by the celebrated imported bull Duke of Exeter—a fine young animal; will be sold for $70. Color of the same rich red that was so much admired in his sire, with a very little white. Duke of Exeter sold at auction, for $500 when 2 years old. The mother took the premium at the County Agricultural Fair, and is now giving 20 quarts of rich milk per diem. The above low price is submitted to because the animal is getting to that age, that the present owner has no facilities for keeping him. He is perfectly quiet and kind. Apply immediately, to F. E. & A. FIELD, 13 Platt-st.

August 1—1t.* New-York City.

Bedford Land for Sale.

I OFFER for sale the tract of land on which I reside, lying in the county of Bedford, Va., near the Blue Ridge, 25 miles west of the town of Lynchburg, 10 miles south of the James River canal, and eight north of the Virginia and Tennessee Railroad. The tract contains 427 acres, of which near 200 are the low grounds of the north fork of Otter creek, the remainder *Red upland*, All the low grounds, and about 70 acres of the uplands are cleared, and under the use of clover and plaster, have been already raised to a high degree of fertillity; producing fine crops of grain and tobacco. The low grounds possess the somewhat rare advantages of *complete* exemption from overflow; of early maturity of the wheat crops which greatly diminishes the liability to rust; and in consequence of thorough under-draining, of never suffering from standing water after heavy rains. Grass may be successfully cultivated on any part of them, but there are from 20 to 30 acres especially adapted to meadow. Most of the wood land would produce fine tobacco. The improvements consist of, 1st, a handsome, a spacious dwelling of brick, with eight rooms, exclusive of a pretty dry and well ventilated basement. This house has just been erected of the very best materials, in plain handsome style, with special regard to comfort and convenience of arrangement; 2d, of a large and convenient barn 60 by 44 feet, with a basement so arranged as to afford shelter for stock and storage for root crops; excellent stables and cow houses, good Negro houses, store, weaving and wash rooms, tobacco barns, &c. All these out-houses have been erected within a few years. In a word, a very small outlay is needed to perfect a plan of improvement, which when completed, will render this one of the most beautiful and desirable farms and residences in this section of the State. It is exposed to market, only because the feeble health of the owner renders necessary a removal to a warmer climate.

☞ Communications may be addressed to Davis' Store, Bedford co., Va. Aug. 1—2t. WM. DAVIS.

Great Sale of Superior thorough-bred Short-Horn Cattle.

THE subscriber will offer for sale, his entire herd of choice Short-horns, comprising 50 head, young and old, at public Auction, on Wednesday the 13th of October, 1852, at 1 o'clock, P. M., at his farm 2½ miles from the city of Troy; reserving to himself one bid on five Cows and Heifers and one Bull, say six head in all, and these to be pointed out previous to the commencement of the sale; this bid will be made public when the six animals are brought to the stand for sale. Should any gentlemen advance on the single bid made by the proprietor, the highest bidder will be entitled to the animal. It is proper to say, the severe drouth in this vicinity reducing the hay crop one half, has decided the proprietor to make this sale at the time named, instead of next June, which he had purposed to do.

The well established reputation of this herd in this Union, and in Canada, and the splended herd it has measurably sprung from, viz: the famed herd of that eminently English breeder the late Thomas Bates, Esq., renders it hardly necessary to comment upon its superior merits. It may not, however, be inappropriate to remark, that the establishment of this herd was commenced in 1838, and that the most careful attention has since been paid to its breeding, and that it now contains mostly all the reserved stock of two former public sales. And besides these he has now on the passage across the Atlantic, shipped 21st June, on board the Packet Ship Kossuth, Capt. Jas. B. Bell, a superior yearling roan Bull, having many crosses of the famed Duchess Bulls of Mr. Bates. Including this latter animal and the two beautiful red roan three year old Heifers, which came out from England last September, "Yarm Lass" and "Yorkshire Countess," and the beautiful Heifer Calf of the latter animal, got in England by the Duchess Bull 5th Duke of York, there will be 14 head of this imported stock, and its immediate descendants. There has been sold from this herd but three Heifers from these importations, and these cows were sold at $300 each. All the young bulls bred from these cows, except those now offered for sale, have also been sold at private sale, at $300 each, most of them while quite young.

Besides these 14 head of high bred animals, the noble premium cow Esterville 3d, bred by E. P. Prentice, Esq., of Albany, and the equally fine two year old, red and white Heifer bred by me, got by the Bates Bull Meteor, and three of the famed milking Willey tribe, the same tribe of cows as the Heifer Ruby, sold by me to Mr. S. P. Chapman of Madison county, and which cow was awarded the first premium by the N. Y. State Agricultural Society, for producing the largest quantity of butter in 10 days in June, and 10 days in August, on grass pasture only, being a fraction over 40 lbs. in those 20 days. There are other valuable tribes in the herd, as the printed Catalogue will show.

The catalogue will be ready for distribution about the 1st of August, and will exhibit richness of pedigree rarely to be met with, showing the descent of most of the animals, from the best animals on record in the English herd book. Having received an invitation from H. Strafford last winter to forward a list of the pedigrees of my herd to be inserted in the forthcoming volumes of the English herd book, of which Mr. Strafford is now the editor, several pedigrees were sent to him of the animals here offered for sale, and will appear in said book.

A credit of 9 months will be given on all sums up to $300, and 9 and 18 months on all sums over $300, for approved paper, with interest, payable at some bank in this State. GEO. VAIL.

Troy, N. Y., Aug. 1—3t.

Thorough-bred Devon Stock at Auction.

THE subscriber will offer at public sale, on Wednesday, the 25th August, 1852, at his residence, in Farmington, Conn., about 30 head of pure Devon Cattle, consisting of Cows, Heifers, Bulls, and Bull and Heifer Calves.

This stock was derived principally from the herds of Geo. Patterson, Esq., of Maryland, R. L. Colt, Esq., of New-Jersey, Messrs. Hurlbuts of Winchester, and from imported stock—and have been selected and bred with a particular reference as to their dairy qualities. All cows and heifers offered are, or will be previous to the sale, in calf to my prize bull Prince Albert, a descendant of Geo. Patterson's celebrated imported bull Eclipse, and my prize cow Victoria, which was awarded the first premium at Albany, in 1850, of $25, as the best Devon Cow exhibited in the class of foreign stock, and sold at the same time to a gentleman in Vermont, for $180.

Catalogues, giving a particular description of each animal, with their pedigrees, can be had at the offices of the principal Agricultural Journals, or on application to me, by mail or otherwise.

The sale will take place at 12 o'clock A. M., the 25th inst., and the stock will be ready for examination at 10.

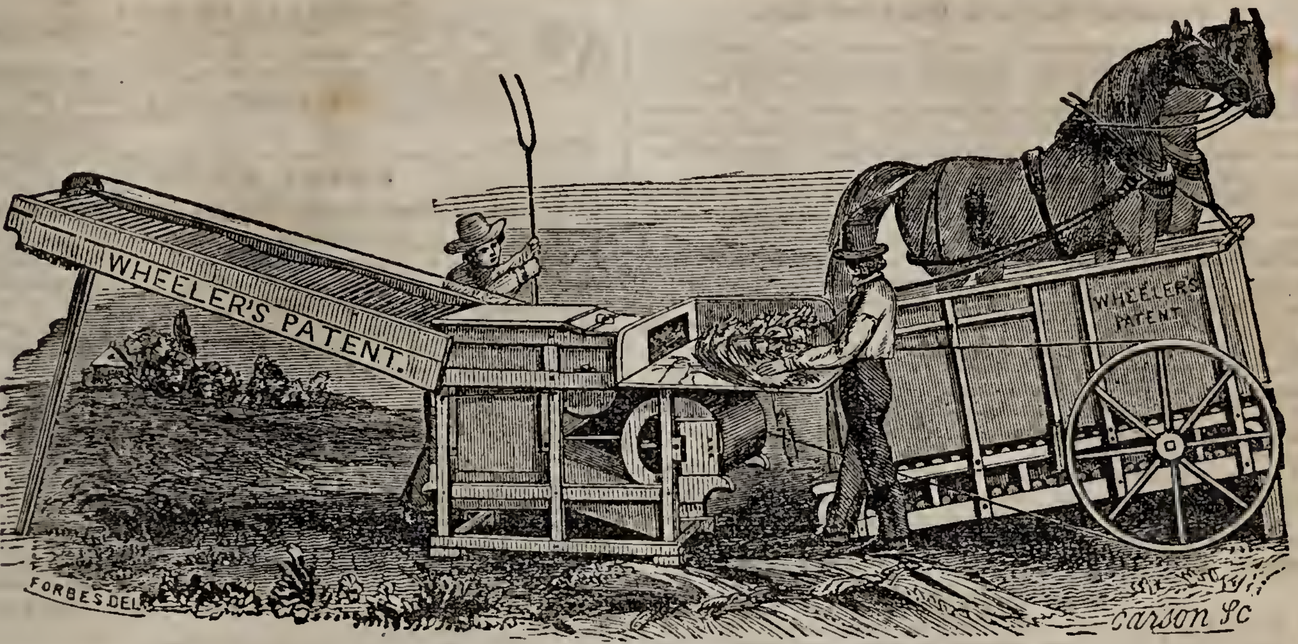
I will also offer at the same time and place, my superior Morgan Stallion Young Gifford, five years old, a colt of the old Gifford Morgan, and from a Morgan mare. Also a Morgan Filly 1 year old the 12th of May last, by the above horse, and from a fine Morgan mare bred by Ambrose Arnold, Esq., of Westminster, Vt., a superior colt.

Farmington, Ct., Aug. 1—1t. WM. L. COWLES.

Valuable Farm for Sale.

THE subscriber offers for sale four hundred and fifty acres of land, being a part of his homestead, and comprising two hundred acres of as desirable land as any in Addison county—lying on the main road four miles north of Vergennes on the border of Lake Champlain, and one mile from the Railroad Station. It is under good cultivation, and furnished with commodious buildings. The remaining 250 acres is wood land; a portion of it covered with a heavy growth of hemlock and other valuable timber, and the remainder with the best quality of wood for fuel. The property will be sold together or in parcels. Postpaid inquiries promptly responded to.

ROW'D T. ROBINSON,
Aug. 1—tf. Ferrisburgh, Addison co., Vt.


WHEELER'S PATENT.
WHEELER'S PATENT
FORBES DEL.
Carson Sc

New-York State Agricultural Works, Albany, N. Y.

BY WHEELER, MELICK & CO.

THE subscribers, in order to meet the increasing demand for their Horse Powers and Threshers, and Combined Threshers and Winnowers, and other machines, have recently added to their manufactory a commodious furnace, so that every article of importance used in the construction of their machines is now made under their immediate inspection. They are thus able to assure their customers, that their work is of the most perfect character, both in workmanship and in the quality of materials used, and in this respect, as wellas in all other desirable qualities, they invite comparison of their Agricultural Machines, with any others in the world.

Among the articles we make are, Wheelers Patent Railway Chain Horse Power and Overshot Thresher and Separator, (for either one or two horses,) *Wheeler's Patent Combined Thresher and Winnower*, (worked by only two horses,) Wheeler's Clover Hullers, Straw and Stalk Cutters, Circular Saw Mills, Horse Powers geered for Churning in large Dairies, &c.

With the exception of the Combined Thresher and Winnower, (which is a new invention of last year) our machines are so widely known as to need no commendation. It is sufficient to say that every article made by us is *warranted to give satisfaction* or it may be returned after a reesonable trial.

The Combined Thresher and Winnower was introduced into the market towards the close of last season, and is in exceeding high favor. We entertain no doubt that it is the most perfcet, compact, and efficient machine now in use, for threshing and winnowing grain, and it certainly is far the cheapest and most economical. In our former advertisements, in the April and May numbers of this paper, we have given numerous letters from persons who, having used this Winnower, express the highest approbation of its merits Since then we have received a number more from different states of the Union, but have only space for the two following.

From T. Waters, Esq., of Shop Spring, (Tenn.,) dated June 24, 1852.

Messrs. Wheeler, Melick & Co.—I have just returned from W. T. Waters', whose Thresher and Winnower was put in operation this morning. He is as well pleased with it as he anticipated. He can dispose of it at cost, and thinks he will do so, and order another machine from you. My own machine has not arrived yet.

From W. D. Bacon Esq., of Wisconsin, dated July 2, 1852.

Messrs. Wheeler, Melick & Co.—I am using, to day, the Thresher and Winnower you sent me, and it far exceeds my expectations, in the perfect manner in which it performs its work. I have had several gentlemen witness its operation, and all concur that it is an extra machine.

We could add others equally flattering if space permitted.

Price of Double Power with Thresher and Winnower,.... $225
" Thresher and Winnower (without Power,)...... $115

Double Power and Overshot Thresher and Separator.

The superiority of Wheeler's Patent Railway Chain Horse Power, and Overshot Thresher and Separator, is universally acknowledged. Thousands of them are in use, many of which have threshed from 50.000 to 100,000 bushels of grain, and are still in good condition. Probably more than four times as many of these machines were sold during last year as of any other kind. They are, beyond doubt, the most durable and economical machine in use. Their capacity has been tested by repeated trials, as well at the New-York and Pennsylvania Fairs, as on several private occasions in competition with another machine made in this city, which has been advertised to be far superior to ours, and in every instance the result has been about *one-third*, and in some instances more, in favor of our machines. In every case except one, where we have submitted our machines to a *working* test at Fairs it has taken the highest premiums, and in that excepted case the Committee decided that our machine performed its work in eight minutes and its competitor in $11\frac{3}{4}$ minutes, being nearly one-third in favor of ours.

We have also exhibited ours in competition with the same machine at the State Fairs in Ohio, Michigan and Pennsylvania, and also at the Provincial Fair in Upper Canada, at all of which we received the highest premiums, viz: In Ohio a Silver Medal and Diploma; in Michigan $20; in Pennsylvania $10; and in Canada a Diploma.

We have numerous similar testimonials, from County Societies, where we have always received the highest premiums awarded to Chain Powers.

Price of One Horse Power, Thresher, Separator and Belting,.. $120
Two Horse, do.,.. 145

Single Horse Power and Thresher and Separator.

This machine is well adapted to the use of Farmers raising an ordinary quantity of grain; with two or three hands it is capable of threshing from 60 to 100 bushels of Wheat per day, or twice that quantity of Oats. The same power is also used for churning, and for driving Circular and Cross Cut Saws, Cutting Feed, driving Grindstones, elevating Grain, Pumping, &c.

Price of Power geared for Churning and driving Cross Cut Saw and for Threshing, &c.,.................................. $92
Belt for driving Thresher, &c.,.................................. 5
Thresher and Separator,.. 35

Single Horse Power and Churning Machine.

This machine has been extensively used in large dairies and with the most satisfactory results. The power is found to be peculiarly adapted to Churning, the propelling force being produced by the weight of the horse to an amount sufficient to drive four or five barrel churns; the motion is varied by altering the elevation of the Power so as to produce all the changes in speed required in the different stages of the process of Churning: this is done by means of a lever and without stopping the Horse, so that the motion is always under the control of the person in charge. The Power is the same as that made by us for Threshing, &c

Wheeler's Feed Cutter.

This machine is made expressly for Horse Power use, and is very strong and substantial. It cuts not only corn stalks but hay and straw with equal facility, and does its work with great rapidity.

Price,.. $28

Lawrence's Saw Mill.

This mill is much used on railways for sawing wood for locomotives, as well as by farmers for cutting stove fuel. With a one-horse power it will cut from 10 to 15 cords of wood, twice in two, per day.

Price, (with 24 inch saw,). $35

Wheeler's Clover Huller.

This machine is compact, simple, and durable. It does its work perfectly without injuring the seed, and is capable of hulling from 5 to 15 bushels of Clover Seed per day, with one horse.

Price,.. .... $28

Trojan Plow.

The Subscribers are also the *sole agents* in Albany for the sale of the celebratad "*Trojan Plow*," made by N. B. STARBUCK, of Troy. These Plows are doubtless superior to any other kind in use, and will be sold by us at the manufacturer's prices.

☞ All Machines made and sold by us are *warranted to give satisfaction*, or they may be returned after a reasonable time for trial. Orders are solicited and will be promptly filled.

WHEELER, MELICK & CO.,
Corners of Hamilton, Liberty, and Pruyn streets,
Aug. 1—1t. (Near the Steamboat Landing.) Albany, N. Y.

EUROPEAN AGRICULTURE, from personal observation, by HENRY COLMAN, of Massachusetts. Two large octavo vols. Price, when neatly bound, the same as published in Nos., $5. For sale at the office of THE CULTIVATOR.

Valuable Virginia Land for Sale.

I OFFER for sale between 700 and 800 acres of *land*, handsomely located in Prince George county, Va., lying immediately on Chip Oaks Creek, adjoining Lower Brandon plantation on the south, 25 miles from Petersburg. About 200 acres are cleared, and the balance tolerably well timbered with oak and pine. The cleared land was marled several years ago, and 1,000 bushels of marl, with 1,500 bushels of lime have been recently applied to it.

The improvements are a good brick house, with five rooms—from which there is a beautiful prospect of James River—a kitchen, smoke-house, stable, a barn with stationary horse power attached, and a well of good water. The buildings are within 300 yards of the main landing where vessels load with produce, wood, &c., and unload lime at seven cents per bushel. Marl abounds on the opposite side of the creek. The whole tract is well watered by springs and brooks, that run through fine meadow lands, a part of which are cleared.

I will sell it entire or in parcels to suit purchasers, as it can be advantageously divided into four farms. If not sold privately, (of which due notice will be given,) before the 30th day of September next, I will sell it upon the premises, on that day, at public auction, without reserve.

Persons wishing to view the property, will leave the Richmond and Norfolk boat at Lower Brandon wharf on James river, three miles from the property; or I will give any information to those addressing me (post-paid) at Cabin Point P. O., Surrey county, Va.

Aug. 1—2t. E. T. FETTER.

$1,000 Challenge.

I OFFER to place *one thousand dollars, cash*, into the hands of a party chosen, against *one thousand, to be paid* into the hands of the same party, by any manufacturer of threshers in the United States, if a machine can be found that will thresh and clean, fit for market, or seed, with the aid of *only two horses*, 100 bushels of wheat and rye, in less time than I can with my "Excelsior Wrought Iron Cylindrical Thresher and Cleaner." The grain to be thoroughly threshed, without white caps or broken, and the straw delivered long enough to stack, and free from chaff. The winner to receive the $2,000 with both machines and power.

An acceptance of the above must be in the hand writing and over the signature of the acceptor, stating his ability to pay the forfeit, and sworn to before any legally authorised person.

For circulars address JOSEPH G. GILBERT, 216 Pearl street, New-York. Aug 1—1t.

Urmy's Patent Double Geared Self Adjusting Lever Horse Power,

FOR two or eight horses, price $65.00. *Urmy's Patent Endless Chain Power*, price from $65 to $100. *Urmy's Patent Corn Stalk Cutter and Grinder*, will cut and grind 100 bushels of corn stalk, or one ton of hay per hour, price $35 and $10. *Urmy's Patent Seed Drill* will plant any kind of grain, in any given quantity, at any required distance, on plowed or unplowed land. *Gilbert's Excelsior Thresher and Cleaner* will ride on Urmy's two horse Railway Power, to which wheels can be attached and thus drawn by two horses to any place desired, and the same team can thresh and clean, fit for market, one half to three-quarter bushels of wheat per minute. The subscriber has been informed that a number of parties have infringed on Urmy's Railway power, I notify such persons, and all infringers, that they will in time be dealt with, and to avoid correspondence I publish the claim of Mr. Urmy. "Constructing the links of the Endless Chain of a Horse Power, in the manner described, so that they form firm connection and a permanent axle for the friction rollers, while at the same time they constitute the rack by which the power is transmitted, substantially as set forth, by which means the use of axles extending through from side to side, is dispensed with, while the advantage of the roller attached to the platform is retained, forming a cheap and efficient horse power. County rights on the above machines for sale for $100 and upwards. State rights or the entire unsold States, sold on advantageous terms. Profits in manufacturing 100 per cent. Castings to those purchasing rights at cost.

Aug. 1—1t. JOSEPH G. GILBERT, Att'y for Inventors.

Kinderhook Wool Depot.

THE subscribers continue the business of receiving and selling wool on commission. Several years experience, an extended acquaintance with Manufacturers, and increased facilities for storing and making advances on wool, will enable them, it is believed, to give satisfaction to those who may favor them with consignments.

All who desire it, can have their clips kept separate.

Their charges for receiving, sorting, and selling, will be ONE AND A HALF CENTS PER POUND, and insurance at the rate of 25 cents on $100 worth of wool for each term of three months and under.

Kinderhook, June 1, 1852—3t. H. BLANCHARD & CO.

WATER WHEELS.

THE subscribers are making with success, Jagger's improved FRENCH TURBINE WATER WHEEL.

Tables showing the power and capacity of the same can be had on application. JAGGER, TREADWELL & PERRY,
Eagle Foundry and Machine Shop,
May 1, 1852—6t. No. 110 Beaver st., Albany, N. Y.

STOVES.

THE subscribers are prepared to furnish dealers with a full assortment of PARLOR and COOKING STOVES for coal and wood, on liberal terms.

Circulars giving particulars can be had on application.

JAGGER, TREADWELL & PERRY,
Eagle Foundry, No. 110 Beaver st., Albany, N Y.
May 1, 1852—6t.

PERUVIAN GUANO

AND other Fertilizers. Several hundred tons of first quality of Peruvian Guano, constantly on hand for sale.

Also, BONE DUST, PLASTER OF PARIS and POUDRETTE.

A. B. ALLEN & CO., 189 and 191.
Water-st., New-York.
Jan. 1—tf.

EMERY & CO.'s

Improved Horse Power. Thrashers and Separators.

THE undersigned have been appointed sole agents for the sale of Emery's new patent Improved Horse Power, Thrashers and Separators in the city of New-York. The State Agricultural Warehouse is the only Depot where this superior power can be had. As many powers are represented as Emery's patent, to avoid impositions, be careful to observe that the name of Emery & Co., is cast in full on every link of chain and the wheel hub.

LONGETT & GRIFFING.
July 1—tf. 25 Cliff street, New-York.

FIELD SEEDS.

AUSTRALIAN WHEAT.—Very superior. The berry of this grain is extra large, and makes the best of flour. It produces a greater average crop than any other variety now grown in New-York. Several years' experience in its cultivation, proves that it is less liable to rust or mildew than other kinds; and as the stalk is large and strong, it is also less liable to blow down or lodge. Price, $4 per bushel. Other varieties of wheat, such as the White Flint, Mediterranean, Black Sea, &c.

BUCKWHEAT, of the best kinds in market.

RUTA BAGA, or Sweedish Turnep Seed. The Purple Top and other superior varieties.

TURNEP SEED.—Large White Flat, Long White, Red Top Flat, Yellow Aberdeen, Yellow Stone, and other improved kinds for the field or garden A. B. ALLEN & CO.,
June 1, 1852—tf. 189 and 191 Water st., New-York.

Albany Drain Tile Works.

No 60 Lancaster Street—West of Medical College, Albany.

THE subscriber has now on hand, Draining Tile of the following descriptions. Prices reduced.

HORSE SHOE TILE.

5½ inch Rise, or	4½ inch Calibre,	$18 00 pr. 1000.
4½ " "	3½ "	15 00 "
3½ " "	2¾ "	12 00 "

SOLE TILE.

4½ inch Rise, or	3½ inch Calibre,	$18 00 pr. 1000.
3½ " "	2¾ "	12 00 "

These Tile are over one foot in length, and are so formed as to admit water at every joint, draining land from 12 to 20 feet each side the drain—being the cheapest and most durable article used.

Tile sufficiently large for drains around dwellings, at $4 and $8 pr. 100 pieces. Orders from a distance will receive prompt attention.

Albany, April 1, 1852—tf. JOHN GOTT.

Albany Tile Works.

Corner Patroon and Knox Streets, Albany.

THE subscriber will furnish to Agriculturists, of the most approved patterns, Drain Tile suitable for land drainage, of a superior quality, over one foot in length, 3 to 4½ inches calibre, from $12 to $18 per 1000 pieces. They are formed to admit the water at every joint, draining land from 12 to 20 feet each side of the drain, being the cheapest and most durable article used.

Tile sufficiently large for drains around dwellings, at $4 and $8 per 100 pieces, being cheaper and more durable than brick drains.

The great importance of thorough drainage is daily becoming more apparent. Orders from a distance will receive prompt attention.

March 1—6t A. S. BABCOCK, Albany.

Improved Stock.

CATTLE, of the Durham, Devon, Hereford, Alderney, and Ayrshire breeds.

SHEEP, of the Native and French Merino, Saxony, South-Down, and Cotswold.

PIGS of the Lincoln, Suffolk, and Berkshire breeds.

From our long experience as breeders and dealers in the above kinds of stock, and our excellent situation for purchasing and shipping, we think we can do as good justice to orders, as any other house in the United States. A B. ALLEN & CO ,
Jan. 1, 1852—tf. 189 and 191 Water st., New-York.

Valuable Farm for Sale,

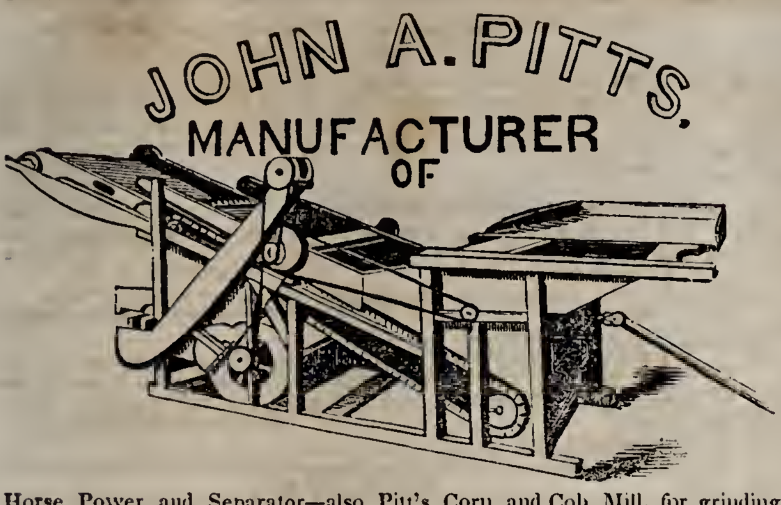
SITUATED in the town of Smyrna, Chenango county, two miles north of the village, and one mile west of the Chenango river—it contains 130 acres, 30 acres in timber suitable for fencing and other farming purposes. The land is in a good state of cultivation, well fenced and watered. The buildings are extensive, commodious and mostly in good repair. A large orchard of grafted fruit. One half of a good water power and saw-mill included. Price $30 per acre.

Smyrna, July 1. 1852—2t.* J. W. COLLINS.

Agricultural Books

OF all kinds, for sale at the Cultivator Office, 407 Broadway, Albany.

THE Transactions of the New-York State Agricultural Society, vols. 1 to 9, for sale at the Office of "THE CULTIVATOR," price $1 per vol.



PITTS' PATENT SEPARATOR

AND

DOUBLE PINION HORSE POWER.

OWING to the increased demand, and being desirous of locating at a convenient point for shipping, I have removed to Buffalo, N. Y., and have erected a large establishment for the purpose of manufacturing the above celebrated Machines, for threshing and cleaning grain at one operation.

This is the same Machine that has stood, and now stands, unsurpassed by any Machine in existence for the above purpose. It has been exhibited at nearly all the State and County Agricultural Fairs throughout the United States, and always received the *first premium.*

The Machine has recently been much improved, enlarged, and rendered more substantial in all its parts. I therefore offer it to Farmers of the different wheat growing districts, to be all I claim for it, viz. *the best Machine* for threshing and cleaning grain, now in existence.

I also manufacture Pitt's Improved Endless Chain Two Horse Power and Separator—also Pitt's Corn and Cob Mill, for grinding feed for stock.

My Horse Powers and Separators are all warranted to be a better article than can be purchased at any other shop—and if they do not, on trial, prove to be so, I will take them off the hands of the purchasers at the price they may pay me for them.

P. S.—The Patent Right on the Separator has recently been extended for a further term of seven years, and all *infringements* on *said right* will be dealt with according to law.

JOHN A. PITTS.

Buffalo, N. Y., July 1, 1852—tf.

Great Sale of Short-horn Cattle in 1852.

THE subscriber, contemplating some important changes and improvements upon his farm, will sell, *without reserve*, his entire herd of thorough bred, and high grade Short-horn cattle, consisting of upwards of ONE HUNDRED head of Cows, Heifers, Bulls, and Bull and Heifer calves.

This valuable herd of cattle has been nearly all bred by the subscriber, on his farm, and under his own eye, with a particular view to their milking quality, which he believes he has been successful in developing to a degree not excelled in any herd of cows in the United States. Ever since the year 1834 he has been engaged in breeding Short-horns, in the belief that no cattle kept by the farmers of this country, were equal to them in all their qualities, as dairy and feeding animals, and this belief has been fully confirmed by seventeen years experience.

Commencing with animals selected from the best thorough-bred stocks, then to be found in this country, this herd has been continually added to, and improved by selections from the best imported stock, and their immediate descendants. During the years 1845, '46 and '47, the Short-horn blood of the late celebrated Thomas Bates, of Kirkleavington, England, was resorted to in the use of the imported bull, Duke of Wellington, and of Symmetry, (by Duke of Wellington, out of the imported Bates Cow, Duchess,) belonging to Mr. George Vail, of Troy, N. Y., which bulls were hired of Mr. Vail for three years. The animals of this herd, since grown up, inherit, more or less, of that blood, which is believed by those having opportunity to judge, both in its milking and feeding qualities, to be equal to any other previously imported; and that belief is confirmed by the prices obtained during several years past, for animals descended from that stock.

For the quality of the stock bred by the subscriber, he can, without vanity, refer to the recent Short-horn sales of Messrs. J. F. Sheafe and Lewis G. Morris, in which some of the highest priced animals were immediately descended, or purchased from this herd. The unrivalled cow, "Grace," owned by Messrs. Sherwood and Stevens, and probably the best *fat* cow ever bred in America, described in pages 183 and 184, vol. x., of the American Agriculturist, was bred by the subscriber; and numerous animals in various parts of the United States, the West Indies, and the Canadas, which have sprung from his herd in years past, may be referred to.

In 1850, the imported bull, Duke of Exeter, of the Princess tribe of Short-horns, (for pedigree of which see (10, 152,) vol. ix., of the English Herd Book,) sent out from England for Mr. Sheafe of New-York, by Mr. Stevens, from the distinguished herd of Mr. John Stephenson of Wolviston, England, was purchased and introduced into this herd; and about forty of the cows and heifers are now in calf to him, all of which will be catalogued for the coming sale. In the quality of his flesh, and in the milking excellence of his ancestry, no bull imported in the into the United States can surpass the Duke of Exeter. His own stock, in the hands of several gentlemen in the State of N. York, are confidently referred to as evidence of his value.

The herd now offered for sale for sale will consist of about FIFTY, thorough breds, including cows, heifers, and heifer calves; and probably TEN OR TWELVE young bulls, and bull calves. The remainder, about fifty in number, will comprise young cows—good, proved, milkers—heifers and heifer calves, together with a few superior bull calves, from the best milking cows, of high grade, Shorthorns, with an occasional dash of Devon blood intermixed—the best of useful, family cows.

All the calves, or nearly all, both thorough-bred and grade, will be the get of the Duke of Exeter; and all the cows, and two-year-old heifers will be bulled by him, (if he lives,) previous to the sale; thus will be combined the blood of the Bates, and the Stephenson stocks, comprising as much excellence, both in milk and flesh, as can be found in any animals whatever.

In addition to the stock above enumerated, will be eight thorough bred Herefords—three cows, one two-year-old bull, one yearling bull, and three calves. One of the cows, (Rarity,) was imported by Messrs. Corning and Sotham in 1841. The other cows and calves are her descendants by bulls of the same importation.

Also, two or three Devon bull calves, got by Mr. Ambrose Stevens' imported bull "Candy," bred by Mr. Quartly, of Devonshire, England, and out of cows descended from the herd of the late Earl of Leicester.

Also, two pairs of thorough-bred, six-year-old Short-horn oxen, and two or three pairs matched two and three year old steers.

Also, ten or twelve South Down buck lambs, got by an imported Ram from the celebrated flock of Jonas Webb, of Babraham, England, and out of Ewes descended from the flocks of Mr. Webb, and Mr. Ellman, of Sussex.

The sale will be on the 18th August, on the premises occupied by Peter Gurbrane, at the Homestead farm of Gen. Van Rensselaer, on the Troy Road, two miles above Albany, where the stock will be about ten days previous to the sale.

Catalogues will be ready by 15th June, and forwarded to all post-paid applicants.

For further particulars, inquiries may be made by letter, directed to the subscriber, or to A. B. ALLEN & CO., New-York.

June 1. LEWIS F. ALLEN, Black Rock, N. Y.

New and Important Insurance.

Northern N. York Live Stock Ins. Co., Plattsburgh, N. Y.

INCORPORATED by the Legislature of the State of New-York, July, 1851. Horses, Cattle, and all kinds of Live Stock insured against Death, by the combined risks of Fire, Water, Accidents, Diseases, &c CAPITAL, $50,000.

GEORGE MOORE, Plattsburgh, Sec'y.

I. C. Mix, Fort Ann, Gen. Agent.

October 13, 1851.

This company are now organized and ready to receive applications for insurance. It is confidently believed that the owners of valuable animals will avail themselves of the advantages offered by this mode of protection. If fire, life and marine insurances are proper and expedient, so is live stock insurance: the reasons for insurance are equally applicable to all.

For terms please apply to Company's Agents.

Plattsburgh, July 1—tf.

Kell's Improved Horse Powers and Threshers.

WHITE & PRENTISS, successors to Philip H. Kells, would respectfully inform the public that they are now manufacturing Horse Powers, Thrashing Machines, &c., with the valuable improvements made by Philip H. Kells, and solicit the call of such as wish to purchase single or double RAILWAY HORSE POWERS, SEPARATORS, OVER OR UNDER SHOT THRASHING MACHINES, of the latest and most approved construction, and of the best workmanship and materials. From their enlarged and improved facilities for carrying on the business the subscribers are confident they can supply customers with as good work, and on as liberal terms, for cash, as any other establishment in this state.

Orders from any part of this or other states, will be immediately attended to, and promptly supplied. Hudson, June 1, 1852—3t.*

A First Class Dairy Farm for Sale.

MY farm of 320 acres, four miles south of the village of Oxford, Chenango county, N. Y., and near the Chenango Canal. 250 acres are under high cultivation, durably fenced, and well and permanently watered. The remainder is well timbered. It has a large two story mansion, five large barns, and sheds and out houses, in good repair. The soil is deep and of superior quality. It is admirably adapted for a dairy, or for grazing and grain; has a fine orchard of choice grafted fruit; and for profit, health, and beauty of location, cannot be surpassed. It is fully supplied with farming tools, and about fifty head of cows and young stock, all or any of which may be had with the farm. The New-York and Erie Railroad furnishes ample facilities for forwarding produce to the New-York market at all seasons, and the route of the contemplated Albany and Binghampton railway, passes within a few miles of the farm. The farm can be conveniently divided. Price low—title perfect. Terms most easy.

G. VAN DER LYN,
Oxford, N. Y.

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New Edition of American Fruit Culturist.

Just Published, by DERBY & MILLER, Auburn, N. Y.

THE AMERICAN FRUIT CULTURIST; containing directions for the propagation and culture of Fruit Trees, in the Nursery, Orchard, and Garden; with descriptions of the principal American and Foreign varieties, cultivated in the United States. By JOHN J. THOMAS. With over 300 accurate illustrations. SEVENTH EDITION; containing 40 pages of new matter, with full directions for the management of dwarfs and pyramids, besides some hundreds of smaller additions, and many new engravings. 1 vol.—over 400 pages—price $1.

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Aug. 1, 1852—2t.

MANURES.

PERUVIAN GUANO, 2¼ to 2½ cents per pound.
BONE DUST, when taken in equal quantities, $2.25 per barrel.
BONE SAWINGS, separately, $2.50 per barrel.
PLASTER, $1 to $1.25 per barrel.
POTASH, 3¼ to 4 cents per pound.
CHARCOAL, $1 per barrel.
SULPHURIC ACID, 2¼ to 2½ cents per pound.
SUPERPHOSPHATE OF LIME, 2½ cents per pound.
WOODS' RENOVATING SALTS, one cent per pound.

For sale at the State Agricultural Warehouse, No. 25 Cliff street, New-York. LONGETT & GRIFFING.

Aug. 1—2t.

Seed Wheat.

AUSTRALIAN WHEAT, Canada. White Flint, Soules, Mediterranean, in bags or barrels. For sale by

LONGETT & GRIFFING,
No. 25 Cliff street, New-York.

Aug. 1—2t.

Superphosphate of Lime,

FOR farming purposes, in quantities to suit purchasers. Analyses will be sent to those that desire it. For sale at the State Agricultural Warehouse, No. 25 Cliff street, New-York.

Aug. 1—tf. LONGETT & GRIFFING.

United States Agricultural Warehouse and Seed Store,

No. 197 Water Street, New-York.

THE subscribers solicit the attention of the public to the large and varied assortment of Agricultural and Horticultural Implements, Field and Garden Seeds which they have constantly on hand, and offer for sale at the lowest prices and on the best terms.

Aug. 1—tf. JOHN MAYHER & CO.

HORSE POWERS, Threshers, and Separators, Endless Chain Powers of all kinds ever made for one and two horses, also cast iron Sweep Powers for one to four horses. Threshers and Separators to match the above. JOHN MAYHER & CO.,

United States Agricultural Warehouse and Seed Store,
No. 197 Water Street, New-York.

Aug. 1—1t.

HAY AND STRAW CUTTERS, of all styles and sizes, for cutting Hay, Straw, or Corn Stalks, for sale at the United States Agricultural Warehouse and Seed Store, No. 197 Water-St., New-York. JOHN MAYHER & CO.

August 1—1t.

Fowls for Sale.

AFTER August, the subscriber will have for sale Fowls raised this season, from the following stocks:

Shanghaes—Forbes' Buff, Marsh's do., Perley's do., Andrew's White, White's Black, and Kirtland's.

Cochin Chinas, the Queen's stock and Bailey's. Also, Black Spanish.

Warranted pure blooded. They have been bred with care, and are worthy the notice of breeders or fanciers.

Albany, N. Y., Aug. 1—2t. J. M. LOVETT.

FOR SALE,

50 EWES and a few Bucks from my flock, the wool of which has sold, for the last three years, for forty-seven cents a pound, and averaged from three and one half to three and three-fourth pounds per head.

For further particulars, address the subscriber at his residence, Canaan Centre, Columbia county, N. Y., or BLANCHARD and BURT of the Wool Depot, Kinderhook. DANIEL S. CURTIS.

Canaan Centre, Aug. 1, 1852—tf.

NEW-YORK AGRICULTURAL WAREHOUSE.

A. B. ALLEN & CO.,

189 and 191 Water Street, New-York.

HORSE POWERS, Threshers, and Separators. The Endless Chain or Railway Powers of our own manufacture, both single and double-geared, for one and two horses, which has never been equalled for lightness in running, strength, durability and economy. They are universally approved wherever they have been tried.

2d. The Bogardus Power, for one to four horses. These are compact and wholly of iron, and adapted to all kinds of work.

3d. Eddy's Circular Wrought-iron large Cog Wheels, for one to six horses. A new and favorite power.

4th. Trimble's Iron-sweep Power, for one to four horses.

THRESHERS.—Improved Threshers made upon the best principles, threshing clean with great rapidity.

FAN MILLS for Wheat, Rye, Oats, &c., of the best construction.

RICE FAN MILLS made expressly for the South.

GARDEN AND FIRE ENGINES, very useful machines, arranged on wheels, for watering gardens or walks, and afford protection from fire. They will throw a strong stream 40 feet high, are easily worked and not liable to get out of order. Also, small Garden Pumps and Syringes of various styles.

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WATER RAMS, Suction, Force, and Endless-Chain Pumps; Leather, Gutta-Percha, India-Rubber Hose, Lead Pipe, &c.

CORN SHELLERS of great variety of patterns, to shell either by hand or horse power. Will shell from five to 100 bushels of corn per hour.

WAGONS and CARTS, double or single horse, suitable for the farm, the road, and heavy trucking.

GARDEN and CANAL BARROWS, light made or extra strong, as desired.

MEAT CUTTERS, capable of cutting fine for sausages, and other purposes, 100 lbs. or more per hour.

Southern plows of all sizes and patterns, the Double Mould Board or Fluke plow for furrowing and cultivating the sugar cane, &c.

Our implements occupy three large stores, and we believe they make up the largest and most complete assortment in America. In addition, we have a machine shop employing upwards of one hundred men, where any articles in our line can be made to order.

A. B. ALLEN & CO.,
June 1, 1852—tf. 189 and 191 Water st., New-York.

THE CULTIVATOR

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THE CULTIVATOR.

N. ORR sc.

TO IMPROVE THE SOIL AND THE MIND.

NEW SERIES. ALBANY, SEPTEMBER, 1852. VOL. IX.—No. 9.

Obituary of A. J. Downing, Esq.

STARS, unnumbered and unwept, go out from the broad sky; but when a planet fades from our vision, reflection is forced upon us. When one in the strength of his manhood and at the height of his usefulness is removed from his place, leaving his mission seemingly but half accomplished, we pause to acknowledge a higher power than our own, and purposes reaching beyond human foresight.

The sudden and untimely death of A. J. DOWNING, Esq , late editor of The Horticulturist, who was among those who lost their lives at the burning of the steamboat Henry Clay, on the Hudson River, on the 28th July, has fallen with a crushing weight on the hearts of his friends, and upon the public generally, as a common calamity. The place he occupied is now a blank—the commanding position to which he had carved his way, will wait long for a claimant. Though comparatively a young man, he had earned a reputation for ability, and enjoyed a popularity, which few have been fortunate enough to win. Without the advantage of a liberal education,—forced from youth to rely upon his own unaided exertions,—at the early age of thirty-seven years he had elevated himself to an enviable rank among the first minds of the age. At whatever point of view we regard him, we are compelled to admire the symmetry of his character, the vigor of his mind, the versatility of his talents, and that healthful flow of enthusiastic feeling which marks his writings. There are those who can work out beautiful thoughts in marble, who can clothe them in the touching language of poetry, or bid them flow in the rounded periods and convincing strains of oratory, but few minds seem possessed of the power to add by art to the beauty of nature, and make the desert blossom like the rose.

Mr. DOWNING first claims our attention as a practical Horticulturist and Nurseryman. Unlike the majority of working-men, he did not busy himself exclusively in the manipulations and detail of his art, though in these eminently successful, but labored to discover the *first principles* of his profession, and to bring it up to its proper rank in science and the fine arts. When we consider the discouraging circumstances under which he wrought, both in the means of prosecuting its work and the apathy of public sentiment, we wonder that he should have produced a treatise so perfect in his kind, so elaborate and finished as his LANDSCAPE GARDENING. He handles, with apparent ease, the subtil topics of abstract beauty, the moral and social influence of its development in nature, and what is more remarkable, he is equally at home in carrying his theory into practice. This work first appeared in 1841, and though an elegant and costly book, has now passed through four editions. It was the first publication on the subject by an American author, and so completely unknown was the art, that the manuscript remained sometime in the hands of the author without a publisher. It was, however, a complete triumph, and may be said to have almost created a taste for ornamental gardening—it certainly refined and elevated it.

The discussion of the disposition and adornment of the grounds pertaining to a residence, naturally led to the subject of *Architecture.* With all the branches of this art, Mr. DOWNING was familiar, and his COTTAGE RESIDENCES and COUNTRY HOUSES, display with great effect his admirable taste. He discusses the *meaning* and *expression* of Architecture, in a profound and comprehensive manner; and following, what seems to have been a motto with him—"*Never to lose sight of good sense,*"—he shows the absurdity of adopting ancient architecture as the highest form of the art, and argues the necessity of a peculiar national style of building. That he founded a distinct school, we do not assert; but from many sources, and particularly from his own varied culture, sound judgment, and correct taste, he drew just what seemed best adapted to the wants and capacity of the country.

The Fruits and Fruit Trees of America, which was issued in 1846, presents to great advantage, the pomological research and experience of Mr. DOWNING. This work is admirably executed, and has met with universal favor. These works of Mr. DOWNING have given this country a rank among other nations in Horticulture and Rural Taste, and exerted a wide influence upon the improvement of our own gardens and houses. Many a residence, beautified by his skill, many a smiling lawn, and gracefully disposed group of foliage, remain as fit monuments to his memory, and many a home made happier by his teachings, will be saddened by his death.

In the editorship of the HORTICULTURIST, he has shown, perhaps, better than in his other writings, the peculiar fitness of his talents to educate the popular taste for the beautiful in nature and art. The success which has attended this periodical, and the increased attention which is being paid to Landscape Gardening, Horticulture and Rural Decoration, are proof of the beneficial influence of his labors. Whether we read his Letters from England, which exhibit a refined literary taste, and a delicate appreciation of, and full acquaintance with the pleasures of a scholarly and cultivated mind, or the plain sayings and wholesome counsel of "Old Digger," we recognize the same sterling sense and discriminating judgment. Mr. Downing was not by eminence a theorist. It was not his aim to build castles too grand and lofty for human realization, or to show the power of his intellect by forming conceptions, which imagination only could give being to. The great question with him, was, how much of the really beautiful can be made subservient to the public good? how far can elegance and utility be combined? how much of the spirit of the amateur can be infused into the mass of the rural population? He has answered these questions by his deeds.

Mr. Downing was an American, and all his thinking and acting tended toward the welfare and elevation of his country. Very much of his deserved popularity is owing to his ability to popularise whatever he wrote upon. He seized upon what was most needed, and upon that alone, and with strking point and directness, presented it in such form, that his conclusions were irresistible.

His style of writing is unaffected and flowing, and his diction, though elegant and ornate, is never verbose or tiresome. Such a style grew naturally out of his characteristics of mind and habits of thought. His mind was furnished and cultivated, and his impulsiveness bore his thoughts by the nearest way to the desired end. This brings to notice that peculiar earnestness and sincerity which everywhere is visible in his writings. Neither a philosopher or an enthusiast, he combined the excellencies of both in his individuality. Above all others, he was the man best fitted to mould the architectural and rural taste of the country to a correct model, to guide public sentiment to whatever is highest in Nature and purest in Art, and to aid in making America what Heaven designed it should be, the garden of the whole earth.

Mr. Downing has closed his labors too early to have shown the full maturity of his power. If his youth has been thus productive, what results might have crowned a longer life! what beauty might have sprung from a riper experience and an enlarging capacity!

About two years since, Mr. Downing received an invitation to visit Washington, for the purpose of conferring with the President with reference to the laying out the public grounds in the vicinity of the Capitol. For the last year and a half he has been engaged in designing and perfecting his plans, and in accordance with them, a park of some 160 acres is being constructed. It will afford the only example of grounds to such extent, laid out by the rules of art, in this country, and will undoubtedly be a most perfect work of its kind.

In his private character, Mr. Downing was upright, manly, and enthusiastic, and he entered with zeal and energy into every subject which promised to elevate and refine his fellow men. In his social relations he was a *gentleman* in the best acceptation of the term. Courteous, affable and polite to the stranger; generous, warm-hearted, and confiding to his friends, he was universally respected and loved.

The sad circumstances of his death make us less reconciled to his loss. Mr. Downing, in company with his wife, and her mother, sister, and younger brother, together with a lady friend, Mrs. Wadsworth, embarked on the Henry Clay, full of buoyancy and joyous expectation, on their way to Newport Scarce two hours have passed, and that circle is broken. Some are sleeping beneath the wave,—others are weeping on the shore this wreck of hope and happiness. Mr. Downing, his wife's mother, Mrs. De Wint of Fishkill, and Mrs. Wadsworth, were lost—the remaining members of the party were saved,—Mrs. Downing almost miraculously. As Mr. Downing was an excellent swimmer, he must have been borne down by the crowd, or perished in the attempt to save another's life.

We unite with his personal friends and the many who are endeared to him by that charm which his writings breathed, in tendering our heartfelt sympathy to Mrs. Downing. We too can mourn that a great mind has been removed from our companionship,—that a noble heart has ceased to beat,—that a life, rejoicing in such beauty and promise, has gone out thus early.

The Potato Crop.

Eds. Cultivator—The aspect of the potato crop here is unusually promising. The opening spring was unusually backward, so that ordinary field potatoes were not generally visible until about the 10th of June, which was ten days later than is usual. The season has been quite dry, but less so than 1849, when there was scarcely a drop of rain from June 29th, to August 9th.

During the present season, the rains at Utica have been as follows: May 12th, 1½ inches; 29th, ⅝ of an inch; June 9th, 1¼ inches; July 9th, 1¼ inches, and July 29th and 30th, 2⅜ inches. Between these rains we enjoyed a few very light showers, but not enough fell at any one time from May 12th to July 29th, to wet through the hills of potatoes and corn. Hence, superficially planted, and carelessly cultivated potatoes, were, in many cases, hopelessly dwarfed by drouth; but in other cases they have been mostly revived by our late abundant rains. From July 4th to 13th, inclusive of each, the weather was warmer on the whole, it is probable, than it has been for the same length of time for some years. Particularly on the 9th, the temperature arose at nearly 3 o'clock, P. M., to 99°, and was but little below that point for the most of the six preceding hours. I have never known the same elevation but once before, in my recorded experience, the measurement of which, for the last 10 years nearly, has been by a thermometer standing in one uniform position. That occasion was July 20th, 1849, at 11 o'clock, A. M., when it stood also at 99°, for a short time only.

The aspect of the season has been, on the whole, more favorable to the potato than any during the last nine years. For, 1st Though our weather has been very dry, yet I have never known *dry and hot* weather the immediate occasion of potato disease, however much it may dwarf the plant.

2. We have had no *hot rains*, with intervening *hot, close, cloudy* weather, or scalding sunshine, as in the years 1850 and 1851. In these years, this sort of weather was most obviously the occasion of a universal mildew, not only on the potato, but also on many hardy

fruits, as plums, gooseberries, and also upon grapes. The potato, in such weather, seemed to suffer from too great an accumulation of juices, while the absence of dry air and moderate wind, induced a tender state of the cuticle of the plant. These were just the circumstances for the production of mildew, and the consequent depravation of the elaborations and depositions of the plant, and the consequent disease of the tubers.

3. Nor have we suffered this year, from the *severe changes* incident to all these years, previously to 1850, which exhibited a disease of the potato. Our rains this year, even when following hot and dry weather, have not been succeeded by *long continued cold and windy depressions* of temperature,—a state of weather tending to paralyse the circulation of the plant, and deprave the elaborations and depositions, just as in the preceding case, and thus to disease the tuber.

The recent heavy rains have, it is true, been followed by cold windy days, and cold nights, the mercury falling, in some cases, as low as 44°, but the temperature had not been high and impulsive for some time before the rain; the herbage of the potato is now about three weeks older, (and proportionately stronger,) than it has usually been when the weather that impelled the potato disease has occurred.

Thus I entertain strong hope that in all cases of wise culture, the use of the strongest varieties of the old sorts even for seed, we shall have no potato disease, and perhaps in no case whatever.

There is one indication of the unusual health of the potato, which is very strong. I refer to the promise of a considerable crop of potato balls. The old round reds, which have not born since 1848, will bear plentifully this year. So also will some varieties of early Junes, which rarely ever bear. My home seedling varieties of 1849, and my South American sorts, both original and seedling, will all bear. But what is most striking, in the line of facts and argument, is the fact that my seedlings of the present year, i.e. those raised from the seed ball sown the last spring, are now setting seed balls. Of eleven families of such seedlings, eight are thus setting balls. In former years I have rarely gathered a ball earlier than the third year. It is true that I credit this unusual result in part to extra cultivation, but it is in part only. Much of it should be credited to the favorable character of the season.

So far as my reading extends, we are greatly lacking in recorded facts and physiological deductions in regard to the culture of tropical plants, especially the potato. By a comparison of facts, I think it highly probable that *very few potato balls have usually been produced, (at least during the ten years period of the prevalence of the potato disease,) without the occurrence of a considerable period of moist, but especially cool weather in the months of July and August.* If such weather has occurred in the early part of this interval, balls have set and matured. If it has occurred in the latter part of it, they have set, but have not matured. I could easily illustrate this position by facts, but the illustration would be too long for this paper. I do not now take this position confidently, but suggest it as highly probable, and with a view to enlist extended observation.

Should these supposed facts prove true, they will but add another proof to the position, (which I have elsewhere assumed,) *that the climate of much of the United States, is too hot, bright, and dry, and the seasons too short for the highest health of the potato.* C. E. G.
Utica, Aug. 4, 1852.

Profits of Farming.

Eds. Cultivator—A great deal has been said and written of late years, as to the profit or loss of farming. On one side it is contended that a handsome profit can be realised; on the other, that nothing but a bare living can be made. Now both may be right in a certain sense, and both wrong. The difference seems to lie in the fact that each person looks through a separate medium and draws his conclusions accordingly. It is natural to make inferences from one's own management, and for this reason we see such a variety of opinions in the agricultural discussions of the day. To my own mind it is clear as the noon-day sun, that no business is more profitable in the long run, than farming. I well remember, twenty-five years ago, of hearing farmers say that the most they could do was to support a family, pay the taxes, and come out about even at the end of the year. With very few exceptions, these farmers have continued to preach these doctrines and practice them to the present time. They claim that when produce is high, the cost of production is proportionately increased, and when it is low that it will not pay to raise it

It is often said that farmers are not as industrious now as they were forty or fifty years ago. We are not willing to assent to this assertion. There were many farmers at that time, who cultivated large farms and made money, but in nine cases out of ten it was done at the expense and exhaustion of the soil. Now this same class of farmers say that there is no profit in farming in old Connecticut, but that the prairies afford the only locality for profitable farming.

Now all this may look very well on paper, but we are confident in saying that at no time within the last fifty years, has the farming interest been so lucrative in any of the New England states as at present. The good prices which all kinds of produce bring in market, is proof of this.

But good management and system are necessary to success. The old skinning and exhausting process may do on the prairies, but it has run the gauntlet here long ago. If farmers intend to "make money" they must keep up with the times, study their business and adopt new implements and labor-saving machines. Old sayings, old maxims and old tools, are poor capital, and I am satisfied that we should make double the money if we used greater liberality in our management. We try to live by starving our business, and in turn get starved by it—a result which no reasonable man can find fault with. So long as the great majority of our farmers carry on their business for profit, a more prudent and far-seeing course must be pursued.

We were very much pleased with the description of Mr. More's farm, (Dec. Cult., 1851,) which took a premium at the State Ag. Society, and wish the article could be read by every farmer in the state. Had we

known there was a farm cultivated with so much skill near Albany, we should have visited it before this, and shall try to do so in future. Yours truly, L. Durand.
Derby, Ct., June, 1852.

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What Every Farmer may Have.

Every farmer may, if he will, have a *house*, a neat, tasteful structure, adorning his farm, and contributing to his comfort. There is, on every farm, if one could but find it, a fit site for a house, with grounds near it suitable for a garden and out-buildings.

What a pity such locations should not be selected, instead of the sorry places where too many farm houses are placed! We have seen a house standing on a ledge of rocks, and a recess for a garden excavated in a bank in the rear, when, not forty rods distant, a most inviting spot for building was neglected; and another stuck down on a low swampy piece of land, with planks running to the road as a means of access, when on the opposite side of the road, a gentle eminence, crowned with noble forest trees, was occupied by cattle.

As to the houses themselves, much might be said. Generally speaking, they seem to be a product of the farm; that is, a thrifty well cultivated farm, has a snug dwelling on it, and a slovenly, ill-tilled one, has an overgrown or decaying tenement.

A correct taste in building is not, nor cannot be, in the possession of every one. Architecture is a science, and taste is the result of cultivation, and none but men educated to their profession, should undertake to design and build a house.

It is true, that so many sticks of timber, boards, nails, and shingles, will make a building, and so too, a given quantity of iron, steel, and brass, will make a steam engine, but a novice makes a failure when he undertakes to construct either. Still, a little attention, the perusal of a work on this subject, might form some taste, and substitute tolerable dwellings for the ungainly structures that so often are seen.

Every farmer may, if he will, have a *garden*, not a *patch* of onions here, of beets there, of cabbages somewhere else, interspersed with bean poles and potatoes, but a veritable garden, a *cultivated* place.

A farm that has not a plot of ground adapted to the purposes of a garden, had better be abandoned at once. There is no good reason while the real luxuries that spring from the soil, under the culture of the practical gardener, should be confined to the lands of the gentleman of leisure. They belong as legitimately to the sturdy, hard-working farmer, and indeed more so; for he who labors most actively, should reap the richest harvest. All that serves to make life more desirable, that tends to the improvement of the soil, the mind, and the heart, is not beneath the attention of man. We cannot conceive of a more fit place to commence the careful cultivation of a farm, than the garden. It would soon be evident that the greater care bestowed on the soil, the greater its product, and so a system of culture would by degrees be adopted, till the whole farm should become a fruitful field.

In the cultivation of a garden, can be noted on a small scale, all the phenomena of growth, and from data there gathered, one can advance successfully from the tilling of narrow beds to that of broad acres. The knowledge necessary to success in gardening, is rather the result of experience, than of fixed rules. There is requisite a taste for the art, close observation, and a modicum of practical skill; give these, and common sense will supply the deficit. We would not by any means, profess to teach gardening " in six easy lessons," but we assert that any one so disposed can make a beginning.

There are certain adjuncts to a garden, which a majority of farmers who take the trouble to cultivate a few esculent roots, seem to think altogether too trifling to merit their attention. Such are beds of flowers, flowering shrubs, and grape and other vines. That ever potent argument of expense, and the ready excuse of poverty, cannot be urged against these decorations of the farmer's home. A man may be too poor to erect a costly cottage, but no one is too poor to cultivate a bed of flowers, to plant shrubbery around his humble dwelling, or to train a vine to relieve its bare exterior. A beauty unattained by any triumph of art, is thus in the reach of the most obscure. Nature waits to provide, " without money and without price," the ornaments of a cultivated field, and the pleasures of a cultivated mind.

Contrast for one moment, the cottage and the lawn, with the rude dwelling and its unkept grounds—compare the beauty and fragrance of flowers, with the unsightly weed and its rank odor—mark the difference between the luxuriant green of shrubbery, and the vacancy of barren yards, and then decide whether an hour of time can be better spent than in effecting such a change.

The past few years have wrought a manifest improvement in matters of rural taste, but as yet its evidences are confined to cottages and farm-houses, scattered here and there, like oases in the wide desert. It will be seen, however, that as agriculture advances, and system takes the place of confusion, all these things will receive the attention that they so richly deserve.

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Letter from New Brunswick.

Eds. Cultivator—Although there is a considerable number of copies of the Cultivator circulated in this Province, and although that number is gradually increasing, few New Brunswickers are in the habit of writing for your great agricultural periodical. This will continue to be the case, until the system of direct taxation for the support of schools is adopted here; then you may safely reckon on more contributors. As you are no doubt aware, the science of agriculture is yet in its infancy among us; still there is a spirit of enterprise abroad. The system of rotation of crops is being generally adopted, green crops are cultivated on a much larger scale than formerly, and more attention is given to draining; yet many abuses are remaining, and will remain, until the young agriculturist receives a thorough agricultural education. The notion that the farmer may safely remain in ignorance of letters, formerly so prevalent, is fast wearing away, and the rising generation certainly promise to raise the agricultural profession considerably higher in the scale of society. The time is fast approaching when the " tiller of the soil," will be no longer looked upon as inferior to the merchant and the mechanic, in point of rank and respectability. The enterprising agriculturist who directs his attention solely to his pursuit, who leaves political controversies to demagogues, who busies himself not in party disputes, who subscribes for, and reads an agricultural paper, and is constantly planning how he may with the least labor and expense, bring his farm into the highest state of cultivation, must needs be a happy man. His is an ennobling pursuit, his is an engaging and prosperous business. The failure of this firm in the iron trade, and the suspension of payment of that house in the West India trade, concern him not; he is independent of them. Of course the feeding of pigs and the cleaning of stables, are not the most engaging pursuit in the world, yet the thrift of hogs and cattle, the satisfaction of seeing them sleek and clean, and the value of manures, more than counterbalance the unpleasantness of these things. The merchant no doubt feels a secret pride within his breast when he cogitates on his accumulating wealth,—wealth gotten by honest means, and by his own unaided energies; and does the agriculturist contemplate his fields of smiling grain, his acres of sweet scented clover, his orchards of golden fruit, or his flocks and herds with a feeling less satisfactory? I answer, no!

Of the number who embark in mercantile pursuits, one-fourth at least, probably one-third, never see again the capital with which they commenced. The farmer commonly commences without capital; he has often the monarchs of the forest to contend with, but he seldom fails to realize the needful, though he may be obliged to wait long for it; yet fortune will assuredly crown his efforts sooner or later; and he seldom or never fails entirely, unless laziness or uncommonly bad management is the cause of it. While the young men of these provinces, and the United States, are dissatisfied, and are seeking a home in California and Australia,—while one exclaims "I can make more money in the auriferous regions in a month, than can be realized off a farm in a lifetime," the steady farmer jogs on; he cares not for the reports that reach his ear from the land of gold; he weighs well the difficulties to be encountered, and concludes that "without pains there can be no gains," and that the chance of realizing gold is twice as great there as here. Some no doubt get a competency, but I fear the majority do not, and those who return, if they do return, are commonly wrecks of their former selves; therefore instead of "letting go a certainty for an uncertainty," let the young men, especially inexperienced ones, turn their attention to some safer pursuit, instead of listening to the wild vagaries of fancy, which busy bodies delight to pour into their ears; let them become "tillers of the ground," and if they do their utmost, success will crown their labors. J. E. Fairweather. *Norton, Kings county, New Brunswick, July* 1, 1852.

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To Pickle Plums.

A notable house-keeper has furnished us the following excellent mode: Take, say 14 pounds of plums, and put with them 7 pounds of sugar, by placing them in alternate layers with spices, in a vessel. Pour on them half a pint of vinegar. Then heat the vessel in the oven with just sufficient heat to cook them slowly, and when cooked the process is completed. They will keep till midwinter, and are very palatable, even to an invalid who can eat nothing else.

Second Rate Plums may, according to the same reliable authority, be preserved till spring in the following way: Take any plums of inferior quality, [good ones we presume would answer quite as well,] and cover them in a vessel with whiskey. Next spring, when fruit is scarce, and the appetite keen for its preparations, soak the plums in cold water over night, and then stew long. The alcohol will be all driven off, but little acidity will remain, and but little sugar will be needed. They will be found very fine and agreeable. We would suggest that none but strict temperance people should presume to approach the above dangerous article, and *they* should be very careful.

Plums for Pies and Puddings in Winter, may be kept by boiling in molasses, and depositing in jars.

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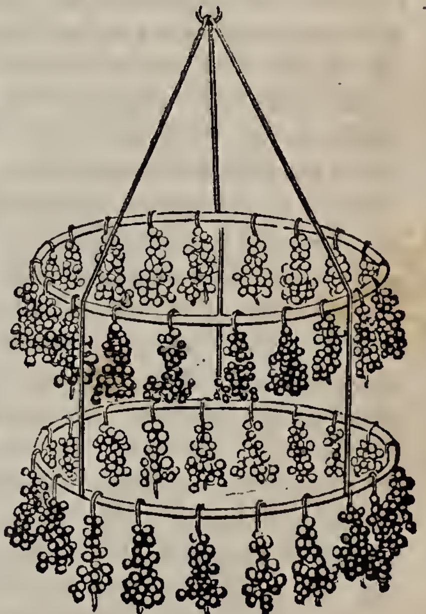
Keeping Grapes.

A new method of keeping grapes in winter has been adopted to some extent in France, consisting essentially in hanging up the bunches separately *by the smaller end*, on wire hooks. Small wires, of sufficient stiffness, and a few inches in length, are bent into hooks in the shape of the letter S; one end is passed into the smaller end of the bunch, and the other placed upon a suspended hoop, as shown in the annexed figure. The position of the bunches causes every berry *to hang away from its neighbor*, and consequently they are less liable to rot by contact, than by any other arrangement.



The hoops are suspended by three cords or wires to a button overhead, like the hook of a baby-jumper; and any convenient number of hoops may be hung successively under the first. The centre of the fruit room may be thus occupied; and the walls may be covered by passing horizontal wires around the walls, and about a foot from them, to receive the hoops for the suspension of the bunches.

This will be found much more perfect than the more common practice of keeping grapes upon shelves or in drawers. It is hardly requisite to remind those accustomed to the successful keeping of grapes, of the necessity of careful picking, the removal of imperfect or decayed berries, and of avoiding too much moisture in the fruit room on the one hand, and of such a degree of dryness on the other as to cause wilting. The former may be prevented by chloride of lime, which absorbs moisture rapidly; and the latter by keeping the fruit room, (which may be only a few feet square,) *hermetically sealed*—opening the door but once a week to examine the fruit and remove any bad berries. The necessity of excluding frost is of course obvious.

The Adirondack Mountains.

Eds. Cultivator—The following remarks are the result of a brief visit to the Adirondac Mountains in November last. Should they seem pertinent to the purpose of the Cultivator, they are at your service.

The group of mountains designated as the Adirondack, occupy an almost central position near the western line of the county of Essex, and to the lovers of the picturesque, afford some of the most sublimely wild scenery that our country can anywhere present to the eye, hills rising upon hills, until they attain an altitude in the heavens of more than a mile in height, sometimes presenting finely arched rounded summits, and at others exhibiting rudely conical peaks, and in many places, sheer precipices of more than a thousand feet in depth, and where they terminate below, may frequently be seen, huge broken masses of rock strewed about, of many thousand tons in weight.

These mountains are, for the most part, covered from near their summitts down to the base, by a dense and forest clad vegetation of gigantic growth, in all the wildness of primeval nature, whilst quitely resting in the gorge-like vallies beneath, are innumerable lakes, whose deep and silent waters are seldom or ever disturbed, but by the wild blast that breaks over their surface, or the sudden splash of the hunted deer, and by the wing of the numerous wild fowl, that at all times frequent, and give life to the otherwise silent repose that prevails.

But the most interesting feature of these mountains is, the many and immense size of the magnetic iron ore beds, which almost everywhere disclose themselves to the sight, along the face of the cliffs which form the sides of these vallies. These beds of ore are of such magnitude, as to prove almost inexhaustible; and when they become properly worked, and due advantage is taken of the natural facilities here offered for the construction of a railroad from the works—a distance of about forty miles to the navigable waters of Lake Champlain—they will be found capable of furnishing our country, for ages yet to come, with any quantity of the finest iron and steel, that can be produced from any quarter of the globe. So numerous are these beds of ore, that from a single point in the town of Newcomb—where the company have their works—several of them can be embraced in one sweep of the eye, the smallest of which, in any other region but this, would be considered immense in size and quantity, and when the country becomes properly explored, there can be but little doubt that many more of an equal magnitude to the largest of these will readily be discovered, together with many other useful minerals in the greatest profusion.

A few only of the most conspicuous beds seen from this point of sight, have, with some degree of attention, been examined. That which is termed the "Sandford bed," has been traced along the exposed surface for a distance of sixteen hundred feet, and retaining a width of at least five hundred. The Adirondac bed, situated immediately in the village, near the works, exhibits a width of seven hundred feet, and continues in extent a distance of three quarters of a mile; and but a few rods from this, another bed is exposed for more than a mile in extent, having a width of about one hundred and fifty feet. This enumeration may serve in some measure to convey a slight idea of the immense quantities of this most useful metal to be found in this hitherto secluded portion of our state.

The principal rock which seems to constitute this vast mass of mountain material, and which likewise forms the magnificent scenery of the Adirondack country, appears to be that which is generally designated by geologists as the gneissoid division of the primary system; but as it embraces in such an abundant profusion, that interesting mineral termed hypersthene, its name has been adopted, so as readily to distinguish it from all other varieties.

This hypersthene rock appears to contain, at various places, and at different elevations, all those numerous and immense masses of magnetic oxide of iron that so peculiarly charactize this entire region. These heavy masses of ore at this place, do not appear to be often found in regular veins, as at some others, but seem rather, from their great magnitude, to constitute an important and an essential portion of this great mountain range. They are in either rudely angulated forms, or else spread out in regular beds, to an extent of some miles together, and with a thickness hardly to be conceived. In some places they present to the eye a regular series of divisional seams, which will most readily induce the belief that they possessed a uniform stratification; in others, again, they appear of a more solid, or of an amorphous nature. The average yield of these ores, from examination, is about ninety per cent of pure magnetic oxide of iron—and the remaining ingredients are composed of earthy materials, principally silex. These earthy constituents vary considerably in the different specimens obtained. They consist of serpentine, hypersthene, garnets, feldspar, labradorite, and iron pyrites, neither of which are of sufficient consequence to furnish any impediment to the facilities of obtaining the pure metal.

The steely appearance presented on the fractured surfaces of some of these ores, is altogether occasioned by the peculiar arrangement of its crystals, during the process of a disturbed crystalization, and not from the action of any of its constituent parts, as was generally supposed. All crystals must have been chemically produced, and the action which unites them so as to form an entire mass, may, in a measure, be considered mechanical, and the chemical action of this ore must evidently have been greatly disturbed, or the crystals would have been perfect in their forms. The regular octahedral is considered the primary form of the crystals, and the structure of some of the layers which constitute these masses—particularly one belonging to the fine grained ore bed—have their crystals so arranged as to present an irregular lamellation, parallel to the planes of the octahedron. When this occurs, the ores are generally considered the most pure.

The following are the minerals which appear in intimate connection with these ores, and sometimes forming constituent parts.

The *Serpentine* found at this place, is generally, either in thin veins, or disseminated promiscuously throughout the large quantities of hypersthene which embraces the ore beds. Sometimes it is seen firmly welded with that mineral, in such a manner as to appear by degrees to pass into it, as the line of demarcation can scarcely be perceived. It is found in a massive, compact state, and also of a fibrous structure, with the external surfaces usually exhibiting an irregularly striated aspect. It is of a light yellowish green color, passing by imperceptible shades, through all the various gradations of tint, into that of a deep green; these tints are seldom uniform in their appearance, being disposed in stripes, veins, or clouded all over with variously shaped spots. This mineral, whenever found sufficiently compact as to render it susceptible of a fine polish, is much sought after by lapidaries, for the various practical applications that can be made of it in their profession. When associated with carbonate of lime, it constitutes the verd-antique marble, so justly appreciated when seen manufactured into table-tops, mantle-pieces, and other articles of ornament, for which it can rarely be excelled in beauty. A vein of this marble is found in the bed of the stream at the village, but as to its dimensions, we had no opportunity to determine. It had the appearance of being beautifully mottled with black, green, and white, but to judge of its merits, it should be in a polished state.

Hypersthene.—The color of this mineral is a deep green, passing into a greyish black; it occurs in lamellated concretions in the greatest profusion, so as to become one of the principal constituents of the entire mountain range; in fact to such a degree does it exist that its name has been appropriated to distinguish the variety of rock, that embraces all the iron ore beds of this region of country. It is intimately associated with labradorite, which mineral appears to lie through it in crystalline masses, whenever it becomes visable to the sight. It has not to my knowledge been applied to any practical uses.

Garnet.—This we observed, scattered about profusely in several localities visited by us, both crystalline, and in small masses, embedded in other minerals associated with those of the ore beds. They were of a deep red color, but we could discover none of the precious variety, although we had reason to believe that they eventually would be found. They are, when in a perfect condition, considered of great value to the jeweller, as gems for ornamental decorations.

Feldspar.—This mineral is quite common in this vicinity, consisting of several distinct varieties; they gradually pass into each other, with colors ranging from white, red, brown, green, to blackish. Some of these varieties are sufficiently compact to sustain a very fine polish, and are then esteemed of value to the lapidary for ornamental purposes.

Labradorite.—This beautiful mineral is not uncommon in this region of country, and is justly in great demand by the lapidary, as it forms one of the most interesting gems that can be obtained, for his use. It receives a fine polish, and when exposed to the rays of light exhibits in bright opalescent reflections, the colors of green, blue and bronze yellow. It is found in small masses and laminæ associated with the feldspar, and several other mineral substances. A specimen of this substance, from the vicinity of St. Petersburgh, once sold to the Duke of Devonshire for the sum of one thousand rubles. It was valued so highly by Catherine the second, that snuff boxes of several small stones, sold for fifteen hundred rubles.

Kaolin.—A most beautiful specimen of porcelain earth was shown me, at this place, which had every appearance of being perfectly pure, but in what abundance it could be obtained at the locality from whence it was taken, we were not informed.

Phosphate of Lime.—This highly interesting substance is rapidly coming into public use as a manure, both in this country and in Europe, for which purpose it has been proved superior to anything yet made use of. A number of specimens, of a very fine quality, were picked up among the fragments of rocks in these vallies, and there are many evidences of its existence in this vicinity, other than those extensive beds and veins at Crown Point, near the shores of the lake.

Iron Pyrites.—This occurs in small cubic crystals in many of the associate minerals of the iron ore beds, and in one instance, we saw it disseminated in such quantities in the ore, as to cause it speedily to disintegrate when but for a short time exposed to the action of atmospheric influences; this would at once suggest the proper method for preparing this ore for the smelting furnace, should it ever become necessary to make use of it for that purpose. This bed is situated at the base of a gently elevated hill, but a few rods from the public street of the village.

Graphite, (Black lead.)—We did not meet with this mineral in place, but it was not unfrequently found in loose pieces, often of some considerable size, strewed promiscuously over the surface of the ground, usually associated with carbonate of lime. In some instances it was distinctly granular in its structure; at others it appeared in lamellated scales, from the smallest particles up to more than an inch in diameter. The specimens found in the vicinity of the lower works, were of the latter variety, and exhibited the laminæ in beautiful perfection. Among the hills, and along the shores of Lake Champlain, whenever found, it is most generally in veins of carbonate of lime, and also in masses of the phosphate of that mineral. We saw no veins during our brief examinations at this place, but have no doubt that they do exist in many places among the hills, and when properly explored, will develop themselves to the scrutizining eye of the investigator. J. E.

The Long Hoe Handles.

Man was formed to walk erect; and if compelled to walk or to labor very much stooping, he soon tires.

We usually, here at the north, purchase our hoes with the handles attached—all complete; and surely they are very neat—made of cast-steel, and bright as silver, with nicely turned handles of about four and a half feet in length—handles too short by half a foot.

Holding, or using them, in the posture to labor with ease, the hoe will not reach the ground by about six inches. These answer well for side-hill work. I have been searching for two years, and the longest I could find in New-Haven or Hartford, was four feet eight inches.

In the south, hoes are usually formed with sockets or eyes for the handles—and handles made on the plantations, from five to six feet in length.

I do not remember ever seeing a Yankee hoe in New-Orleans till last winter, and the handles of which were only about four feet in length.

I am of opinion, were the manufacturers of these northern hoes to make them somewhat larger and stronger, with handles at least five feet in length, and introduce them in the south, that they would soon supercede in a measure, the heavy and clumsy ones there used; and the light ones with long handles, take the place of the short at the north. Respectfully, S. Tillotson. *Canton, Conn., July* 12, 1852.

Production of Hay on the Western Prairies.

The natural prairie grass, although a great favorite by many, for the purposes of hay, is nevertheless very inferior, under the most favorable management, to timothy. Both timothy and clover flourish on the broken prairies, and are so easily cultivated that no reasonable excuse can be urged for using for hay the indigenous grasses. An unbroken prairie is perfectly level, and the soil is so easily cultivated, that no exertion whatever is required to keep the surface smooth, so that when the land is seeded with the cultivated grasses, the original smoothness is retained without much effort. The vegetable mould ranging from one to two feet in depth on high rolling prairies, accompanied with a rich and friable sub-soil, imparts to the cultivated grasses a luxuriance and rankness of growth, that can only be obtained in other countries by a very expensive process of cultivation. The cost of growing timothy, clover, and herds grass hay, on the valley of the Upper Mississippi does not certainly exceed one half what is necessary in a timbered country, and yet the cash value of hay, in the markets of the river towns and cities is fully as great as what is obtained in the interior cities of New-York and Pennsylvania. The average price of hay in St. Louis is $12 per ton, and in New-Orleans from $15 to $20 per ton. The demand keeps pace with the supply, and the present prospect is in favor of a continuation of high prices for all kinds of forage, as the demand in the lower Mississippi towns and cities increases quite as rapidly as the increase of the northern supply.

At many points along the Mississippi a suitable quality of prairie land, for the production of hay, corn, and other spring crops, may be had for $5 per acre, which will yield in timothy, in an average of seasons two tons of superior quality of hay per acre. These lands may be had in any quantity within a distance of from five to ten miles of shipping points, on the river, and their fertility is such that for a long period of time they would yield in average of seasons, the above yield, without any apparent deterioration, requiring, however, to be occasionally broken up and sown with oats or other crops, to be again reseeded with grasses.

The most extensive hay farm that has yet come within our observation, belongs to the Messrs. Bonnells, consisting of six hundred acres of a timothy meadow, made entirely on a rich prairie, and located in the upper part of Lee county, some fifteen miles from the river. This firm will ship this year from the port of Keokuk, Iowa, some *seven hundred tons* of timothy hay, which at this moment is packed away in one of the extensive brick warehouses of that city. It is packed in bales about the size of cotton bales, weighing each from 250 to 300 lbs. hay, and is put up in a suitable condition to ship to California or any other distant portion of the world, if necessity should require it. The press employed for bailing is worked by screws and lever, and cost $200, and four men with it and a horse will readily bail three tons of hay per day, including the preparation of the hoops, which is the constant work of one man to supply the hands whilst bailing. We know of but few branches of productive industry that pays better than growing hay on the prairies for the southern markets, and at some other time a further discussion of the subject may be expected. W. G. Edmundson. *Keokuk, Iowa.*

Management of Manures.

Eds. Cultivator—I notice in the Cultivator for July some inquiries of "K." in regard to the preservation of manure, and as my attention has been of late much occupied in observing the effect of different manures, I read his inquiries with unusual interest.

I will now state how I have managed with portions of my manure, for a number of years, with good success. In dull weather in haying, I haul all the manure from my yards and sheds to the field where I expect to use it the next season, and place in a pile as perpendicular as may be, and concave on the top. If muck or soil are at hand, I mix in an equal quantity or more, with the manure—and in all cases, I cover the sides and top of the pile with either muck, soil, or turf, grass side down. I suffer it to remain till the frost is out of the sides and top in the spring, then shovel it into another pile, taking care to mix the muck or soil with the manure, uniformly through the heap. This is but little labor, as a man will work over forty or fifty loads in a day. He ought to commence the new heap very near the old, and so follow on till the whole is thoroughly composted.

I have invariably found this to be the best of manure. I have had occasion to use stable manure in the same field, on the same crop, and without an exception, that part manured with the compost yielded the best crop. The manure "K." expects to use in August ought to be treated in the same manner—at least it should be covered with soil or turf. I think the sooner he removes it from the cellar, the better; still it will not be as good as if it lay longer in the pile before being used.

I manure my corn in the hill, or if not, I spread it on the top of the land, and harrow it in. I finished plowing under manure on sod or heavy land, some years since. I consider it half lost. Manure should not be used in a green state; and as a general rule, it is cheaper to compost it in the field than in the yard. The compost heaps should be so formed as to retain all the rain possible. J. O. Phelps. *Simsbury, Ct., July* 3, 1852.

Ice-water in Wells.

David Thomas, of Aurora, N. Y., informs us of a mode successfully adopted for having ice-water always at hand, without the trouble of preparing it as wanted. A large block of ice (some 15 or 20 lbs.) was thrown into the well, and in a day or two, or as soon as dissolved, a delicious coolness was imparted to the water, which remained for many days. The effect would be immediate if the ice were thrown in after being broken fine. To those who cannot have constant access to an ice-house, this would be a great convenience, and would save much labor in any case.

Varieties of Poultry, and their Management.

Eds. Cultivator—In response to my notice in the last Cultivator, I have received several applications for information on the subject of poultry, and shall accept your very polite invitation to reply through the Cultivator.

John Giles, Esq., of Providence, one of the most skillful breeders of fowls, and proprietor of one of the largest and most splendid collections of ornamental poultry in this country, (for a brief notice of the collection see Cultivator, page 53 of the current volume,) has sent me a communication containing several questions, on topics which, in my opinion, are of general interest. I therefore propose in the present article, to offer a few very hastily written suggestions, in reply to those inquiries.

The gentleman inquires first—What is the best breed for *profit?* The profit on poultry may arise either from its sale, or its use as an article of domestic consumption. It is presumed the question refers to the former, and the true answer appears to be, that as the cost of rearing the different varieties, aside from the first cost of the stock, differs but little, the most profitable fowls to sell are those for which there is the greatest demand; not necessarily those which are intrinsically the best, but those for which fashion calls. That real utility has as little control of fashion on this subject, as in other matters of taste, is apparent from the fact that so many different varieties have each in its turn, held the highest place in public estimation. Indeed, almost every breed known has had its day of popularity. It is but a few years since the native fowls were the best, and almost only fowls we had; then came several European varieties—first in order of time, the Poland, then the Dorking, Creole and Spanish, held each its brief reign, and after those then came marching (they never walk,) on the ponderous birds of Asia, in unnumbered varieties. Three years since, the most profitable fowls to sell were the Cochin China and Shanghaes; now the public taste demands nothing less than the gigantic Chittagongs. This fowl is no more difficult to raise; is the largest known variety; not yet common, and commands a higher price than any other fowl. As evidence of my sincerity, I add that I have, myself, disposed of all other fowls, and am raising this noble variety alone.

I am asked secondly—*Which breed is best for the table and laying?* These two qualities are, in my judgment, inconsistent and antagonistic; they may, and often do, co-exist in a *good degree*, but it is too much to expect the same fowls to *excel* in both. Some fowls are so good layers, that they will lay almost constantly during all the season of the year, when they might be expected to gain flesh. The aggregate loss to the fowl is five or six times its own entire weight, and it follows, almost as a matter of course, that good, that is *superior* layers, grow poor. On the other hand, if fowls are kept for the table *merely*, the less they lay the better, as it is well known that those are best for this use, which are prevented by art from laying at all. The quality of fowls is strongly influenced by *constitutional temperament*. In some the brain and nervous system predominate, and such fowls will be more intelligent, active, uneasy, roving, and, (I beg their pardon,) more mischievous than others. These fowls are of the nervous temperament, and would probably be better to lay than to acquire flesh or fat. This description applies to the Game, Poland, Bolton Grey, Spanish, &c. In other fowls we observe such an organization as is connected with the lymphatic temperament. In these the alimentary system predominates. The organs of digestion, secretion, absorption and assimulation, act undisturbed by brain or nerves, and fowls of this class may be expected to feed well, keep quiet, sleep undisturbed, grow rapidly, and at last come to the table with large, plump forms, tender and juicy flesh, and a flavor that would tempt an epicure. This description, will perhaps, cover the Dorking, Shanghaes, Cochin China, Chittagong, &c. It is admitted, that these fowls have in some instances produced very large numbers of eggs—still, it is probably true, that where eggs alone are the object, they can be produced at less cost from the small fowls. For the table there is nothing to compare with the large Asiatic fowls, and of all these, the very best in my opinion, is the *pure* Chittagong.

A third question proposed to me is—*Which is the most ornamental, with laying qualities combined?* This is very much a matter of fancy, and *de gustibus non disputandem.* Of the large fowls, the most showy is the Chittagong. As a general remark, the European varieties are the most beautiful in form and color. Of these, the Spanish has a fine form, and the Dorking a still better. The former of these is admired for its shining black color, and glowing ornaments of the head; the latter as a fowl without fault, having all good qualities, yet none in the highest degree. The beautiful game fowl is too well known to need any description here. Among small fowls, there is nothing prettier than the Speckled Hamburgh. It is well formed, somewhat resembling the wild pigeon. Its color is beautiful, and its whole appearance indicates refinement, sprightly activity, and purity of blood.

A fourth question is—*What fowls are most hardy and easy to raise?* I answer, the common or native fowls. All other fowls, so far as I am acquainted, require a little care, but the natives are so many living witnesses that they can *live* without any. Great improvement has been made in poultry, undoubtedly, but those only can take advantage of it who are willing to give some thought and labor to the subject. All such persons may take their choice of varieties, and will find no insurmountable difficulty in raising *any breed* they may select.

My correspondent inquires further—*Is there any sure cure for the roup?* I am sorry to say that in my opinion, there is not. I do not think the *nature of the disease* is known, or even its *cause.* Its treatment has, as yet, been entirely empirical. The disease has commonly been charged to neglect and exposure to cold and water; but this is not true, for the disease is by no means confined to the flocks of the careless. Fowls bred in the city are more exposed to the disease, and those in close confinement still more so. There is somewhere a violation of some law of their physical organization. A chicken is a compound of certain chemical elements, each of which is essential to the existence of the animal, and all of which are derived from its food. It is my opinion that when confined there may be one or more of these elements for which no provision is made in their food. Of course no intelligent prescription can be made for the disease, until by patient study of their nature, and careful observation of their habits when free, we shall discover its cause. Perhaps the best thing to be done in the case of very valuable fowls, is to send them to some suitable person in the country, to breed them under more favorable circumstances, than in an infested flock shut up in the city. Chickens so reared will go to the city with better constitutions and be more likely to resist the disease.

I am asked finally, *What varieties have you, and at what prices?* I have furnished fowls for my neighbors of the Dorking, Spanish, Creole, Cochin China, Shanghae, &c., but on my own farm I am raising but one kind, and that is the Chittagong.

These appear to me so much superior to all others, that having disposed of all former kinds, I procured, last spring, five layers, and from these have the prospect of raising about two hundred chickens. A part I shall keep, another portion distribute among my friends and have a small number to sell. If applied for early, the price will be, for good specimens, five dollars a pair. A very few select ones have been already engaged at a higher price. Most of the other varieties in this neighborhood can be furnished at prices somewhat less.

I have, in this very imperfect manner, replied to the questions proposed, so far as was intended in this communication. I have a great many other questions received, but must beg indulgence until after the hurry of harvest. I have a larger number of applications from the different states of our country on this subject, than I anticipated, but not one too many, as it indicates a very general interest in the subject, cheering to those who are turning away from the distracting and demoralizing objects of ambition to the majority of mankind, to the innocent and quiet pleasures of rural life. With sentiments of respect I am yours truly, John T. Andrew. *West Cornwall, Conn.*

Dairying on the Western Prairies.

The retail price of butter during the month of April, in all the Mississippi towns and cities, ranged from twenty to thirty cents per lb., and so difficult is it to get a regular supply of good butter, that respectable families are willing to contract by the year, at from fifteen to eighteen cents per lb., including, of course, the winter months. Cheese retails at from eight to twelve cents per lb., and the market is supplied mainly from Ohio.. The New Orleans market, is open to the farmers of the Upper Mississippi valley, at least nine months out of twelve, and with a trifling effort on the part of the northern farmers, the entire trade of that great emporium, might be secured to this valley, instead of being supplied with provisions from New-York, Pennsylvania, and other eastern and northern states. Butter in New-Orleans is ordinarily worth fifty cents per lb., and that market is mainly supplied from the dairies of Orange and other neighboring counties of New-York, where the price of good land, suitable for grazing, is worth from fifty to one hundred dollars per acre, and where the cost of transportation is fully as great, if not greater, than from the Upper Mississippi Valley. The dairymen of Orange, had no difficulty in contracting, the past autumn, for their entire dairies, at thirty-five cents per lb., whilst an Iowa farmer, with the low estimate that is placed upon his skill in this line, in summer and autumn months, cannot get more than ten, and at the farthest eighteen cents per lb., for the produce of his dairy by the season.

This defect will shortly be removed, and an example once successfully established, will renovate the whole business so as to place western dairying on a par with the same business in any other portion of the union, with the additional advantages of cheap land, good water, easy access to markets, and an almost boundless extent of suitable land for the business that cannot be surpassed in any country for its grass and vegetable producing powers. A colony of dairy farmers from Orange county, New-York, have lately arrived in Muscatine county, Iowa, being in an exact parrallel line of latitude with their former residence, and have brought all their appliances with them, and in their purchases have selected mainly with a view of carrying on the dairy business on a large and respectable scale. The butter will be stored in ice houses, and properly packed for the New Orleans market, where one of their company will be located to receive and dispose of the entire produce of the company, or rather of the colony. From experiments already made, an acre of Iowa land, costing some five or ten dollars per acre, within five or ten miles of the river, will produce, with less labor, a greater quantity of butter and of equal if not superior quality to that produced on the high priced and highly taxed lands of Orange county. The experiment now being made, is in the hands of some forty competent, wealthy, and intelligent families, and we shall watch the progress made, and report thereon in due time, as further developments may make it desirable.

The very best quality of land, with tolerably good improvements may be had for from five to fifteen dollars per acre, which for dairying or for any other purpose adapted for northern farming, cannot be surpassed. What is most wanted here, is men of capital, having had long experience in the practical details of agriculture, who will combine, with their money, labor, and skill, a scientific course of husbandry, suited to the circumstances of the soil, climate and other influences of the country, and with such men and means, western farming can be made the most profitable and pleasurable pursuit that could engage the attention of an intelligent mind. W. G. Edmundson. *Keokuk, Iowa.*

Clover for Wheat.—According to Lawes' experiments, the clover that would make a ton and a half of hay, would contain 60 lbs. of nitrogen, which, if plowed in, would be sufficient, *if all were assimilated,* to increase the following wheat crop 12 bushels per acre, and the clover roots six bushels more.

Harrowing Wheat in Spring.—Myron Adams, of East Bloomfield, N. Y., who harrows his wheat early in spring, with a heavy harrow, thinks it increases the crop from two to five bushels per acre. It also greatly assists the growth of the clover seed, sown just preceding the harrowing.

The General Theory of Cultivation.

Eds. Cultivator—The cultivation of the soil, together with the improvement of those animals which are given us as aids in the work, is a noble employment, and furnishes the mind with exhaustless subjects of thought. There are two systems of belief that obtain fully my credence. The one embodies the heaven-given rules to make the moral soil, which sin has cursed, bring forth nourishment for the more enduring part of man;—the other teaches how to provide with the least toil for the wants of the body—to clothe the most unsightly and barren places with beauty and compel them to add to man's comfort and luxury. Though by our fallen condition we are compelled "to eat bread in the sweat of our brow," we are not obliged to gather it by the most laborious process, to eat the earth's most uncultivated products, or to dwell in the most rude and uncomfortable habitations. But rather it is a high virtue to overcome the obstacles thrown in our way—to acquire skill in increasing and appropriating the precious things "contained in the everlasting hills."

I am not qualified by experience or education to give rules for farming. I write simply to express the profit and gratification your paper affords me, and to throw out a word of caution, chiefly to your correspondents.

A writer on breeding horses, after many good observations about the best stock, training, &c., says, "I doubt whether any kind of early training will raise the head of a lubber or keep down the head of a flyer." Another writer on education makes the same statement—no colleges however good can make statesmen of dunces, and no want of education can long keep down the mind in which nature has lodged the elements of greatness.

Now what is this but asserting that no land is to be cultivated but the best; yet most of your correspondents think all lands may be made good—that there is no need of "dunce" or "lubber" land anywhere. Who are our great men, but those whose great minds education has made greater? What are our best horses and cattle, but those that by continual improvement have been raised from the common stock? It may cause a smile to see men of science and dunces, "lubber" and "flying" horses on the same page; still one and the same principle is at work in the production of higher forms of life, whether applied to the physical or moral world—to animals or men, viz: Cultivation.

There are many farmers, who by the continual selection of their best animals for breeding, might have a stock equal to any of the high-sounding English nomenclature. Would it not be wiser then, to keep more prominent this fact, and excite emulation in improving our stock at home, than to search creation over after improved animals. I do not think it possible to make a perfect Black Hawk by obliging him to eat from a high manger, and yet the lacing of the Indian baby to the board has some influence in the right formation of the man, contributes something to the beauty and nobility of the chieftain, and gives him power to spring the bow and wield the battle axe. You cannot make a perfect gentleman by merely removing a pair of clumsy boots and compelling the same clumsy heels in calf to go through college; nor can a pair of cowhide boots conceal the science and dignified bearing of the scholar, who chooses to walk in these in the honorable calling of a tiller of the soil. Deep plowing will not cause a large crop on poor land, without manure. Feeding a colt on hay alone, will not be likely to produce a high spirited creature from a low stock in a single generation; but let a few oats be added, preserve the best for breeders for a series of years, with other things corresponding, and you may work wonders. There undoubtedly is a great difference in the quality of stock; yet it is an old and true saying that "a bad cow may have a good calf," and when this happens let us take good care of it. The conclusion I would draw from these remarks is, that from the best materials we can obtain, by the best means in our power, we should improve our stock and elevate ourselves, never forgetting that what has been done, may be done again. Warner. *Westport, Essex county, N. Y.*

Advantages of Agricultural Reading.

Eds. Cultivator—I have been a careful peruser of The Cultivator for several years. To me it is a source of great enjoyment, in an agricultural point of view; it is a visitor who is anxiously waited for, and most particularly welcomed; a visitor who leaves an indelible impression and gratifying influence, and one who for years to come, should I live, I wish to invite to my fireside. I can remember when I borrowed of a distant neighbor the Genesee Farmer, and how some of the neighbors called *me* the Genesee Farmer, when I told them some of the "big stories" of large crops, and handsome shaped cattle, &c., &c., all of which they "poohed" at, and said "book farming would ruin any man," and "book farming was a complete humbug." In fact they said enough to convince me that one party or the other were consummate blockheads. But I was determined to try to learn something of the profession to which I was becoming more attached. I had not the advantages of an early education in all the particulars which one learns who has been reared on a farm, and I thought I had better read upon the subject, whether I practiced or not. I was fifteen years of age when I moved on a farm, and up to this time I had never seen a grain of wheat. I had always been at school, and like a great many others, did not appreciate my opportunity. About this time my parents concluded to invest their little property in a farm in the county of Cayuga. When we got on our farm, everything looked strange to me; and as for my parents, they were but a trifle in advance of me; my father did not feel competent to manage a farm of one hundred acres. But what I have read upon agriculture has been of vast importance to me, whether I practice or not. My testimony is, that I would not change for money that which I have learned from your paper. I would not even part with those old numbers; *every one* of them is a gem to me, and if they could talk, they would tell of being badly chafed by use.

The success that has attended my farming operations, is wholly attributable to what I have gleaned from works upon the subject. I think every man, if he has no more than four acres of good land, should read, that he may become more wise, and improve that little to the best advantage. What if we do not "follow the Cultivator," as some say; it enlightens our minds, and I get hints every month, that I would ask one dollar a piece for. And I judge that some of them will come in play, and turn something into what will help pay for my farm. Chs. E. Roffe. *Scipio, N. Y.*

Horticultural Department.

Notes on Strawberries.

R. G. Pardee, of Palmyra, N. Y., is one of the most indefatigable collectors of varieties and enthusiastic cultivators of the strawberry in this country. He has given a thorough trial to some forty or fifty sorts. As he has made very accurate observations on season, size, quality, and productiveness, a few brief notes, the substance of which he has furnished us, together with personal observations on his garden, will doubtless be received with interest.

Burr's New Pine—the earliest by three or four days of nearly 50 varieties, and the best flavored of all. As a proof of their *continued* productiveness, successive pickings of heavy crops at each time, were made on the following days,—June 1st, 12th, 18th, 26th, and July 1st. Besides this, they were picked every day for the table, and a few occasionally as late as July 13th. It bears well in sun and shade; in hills, rows, and masses; and full *as long*, but not quite so late, as Jenny's Seedling and some others. The size of the largest specimens were full up to 4½ inches in circumference

Monroe Scarlet—(one of Ellwanger & Barry's Seedlings,) bore the largest quantity of large size fruit on the trial-bed. Five foot-stalks from one plant, produced 80 really large sized berries. Many other plants of this sort, in other parts of the garden, bore similarly, and continued long. The size was from 2½ to 4¾ inches in circumference.

Hovey's bore well in masses and in hills—one specimen measured full six inches in circumference, and a large number four to five.

Willey bore abundantly in hills and rows—a medium size, hard, pleasant fruit.

Moyamensing Pine, is, July 13, bearing finely, of really large, fine fruit.

Walker's Seedling and *McAvoy's Superior*, also continue to bear well.

Crimson Cone pleases me very much—bore a large supply of beautiful, acid fruit.

Jenny's Seedling has done well.

Lizzie Randolph is of the largest average size, but quite deficient in flavor.

R. G. Pardee adds, "I have before me a small stem of the 'Large White Province' currant, of which the fruit of three currants measure each full 9-16 of an inch in diameter, and more than 1⅝ in circumference." It appears to be about the size of the *cherry currant*.

Charles Downing, of Newburgh, remarks, "Our strawberry crop has been fine—nothing in flavor exceeds Black Prince in my soil."

Profits of Raspberry Culture.

A correspondent at Newburgh, N. Y., writes, "In consequence of severe winter, we have no cherries but a few Dukes and Morellos—we shall have no peaches, and very few pears—curculios have taken all the plums. Our *Raspberries* are now ripe, and are *fine*—the Large Red Antwerp is much the best for market purposes; one person 12 miles north of us sends daily to New-York market from *six hundred* to a *thousand* pint baskets, for which he receives fifteen cents each, wholesale." That is, $90 to £150 per day.

New and Old Fruits for Western New-York.

No list of fruits was probably ever made by any one cultivator, that entirely suited another. The differences in palates, purposes, treatment, soil, and seasons, are such as produce, necessarily, some variation in the estimate of the different sorts. But as every one increases his knowledge of fruits, and of the experiments of others, he is enabled to decide more understandingly for himself—and to avoid being led by the nose, as was a certain uninformed neighbor, who changed the top of his pear trees three times before bearing, as each successive sort came into fashion, and was recommended and then discarded by his novelty-seeking friends.

The following list of the most valuable among the newer sorts, condensed from the last report of the Fruit Committee of the Genesee Valley Horticultural Society, is, in most cases the result of much experience, and may be of essential benefit in assisting inexperienced cultivators in making a selection. In a very few instances the committee differed in their estimates, but this was usually in the case of quite new fruits, in relation to which there had been but very limited trial. The kind or species, are given in the order of their season, beginning with

Strawberries.—*Burr's New Pine, Large Early Scarlet, Boston Pine, Hovey's Seedling, Hudson, or Rival Hudson*, and *Crimson Cone*. Ellwanger & Barry's *Genesee*, was recommended as eminently worthy of trial.

Currants.—*Cherry*, remarkable for size, being the largest red.

Victoria, remarkable for its long bunches and late ripening.

Raspberries.—*Large Fruited Monthly*—has produced a fine crop in autumn. Needs protection. and the careful removal of suckers.

Cherries.—*Early Purple Guigne*—the best early sort.

Reine Hortense—beautiful and excellent.

Governor Wood—very early, large, pale red, delicious.

Doctor—good, valuable for its earliness.

The following are noticed,—*Belle d'Orleans*, beautiful, but not high flavored; *Monstreuse de Mezel*, about the size of Napoleon, dark mahogany color, very firm; and *Rockport Bigarreau*, "simply a good cherry, not equal to some of the old sorts." This latter opinion of the chairman was dissented from by some others of the committee, who esteemed the fruit more highly.

Peaches.—*Crawford's Early*—continues a universal favorite—which has led to an overstocked market of fruit at its period of ripening; *Crawford's Late*,—promises to be an important late variety; *Druid Hill*,—has proved a fine, white-fleshed peach, and merits extensive trial. *Peche de Vigne*, fruited the past season for the first time, proves of high flavor, ripens late, and for three years has been entirely free from the curl.

Plums.—*Jefferson, Lawrence*, and *Reine Claude de Bavay*, are specially recommended for excellence, the latter also for its lateness, hanging long on the tree and improving by shrivelling.

Pears —The following are merely named as having been proved by abundant experience, of first quality:—*Madeleine*, *Bartlett*, *Osband's Summer*, [the latter sometimes of inferior *quality*,] *Seckel*, *Swan's Orange*, *Stevens' Genesee*, *Virgalieu*, *Gray Doyenne*. In addition to these, the *Bloodgood* is recommended as being usually, and *Dearborn's Seedling*, as always excellent,—but mostly too small for market. *Doyenne d'Ete*, a small, new, early variety, gives high promise. *Summer Frankreal* and *Tyson* are recommended as valuable summer pears. Among autumn varieties, *Louise Bonne of Jersey*, *Dix*, *Swan's Orange*, *Belle Lucrative*, *Bezi de Montigny*, *Oswego Beurre*, *Flemish Beauty*, *Beurre Diel* on quince, *Doyenne Boussock*, and *Duchesse d'Orleans*, are all named as very valuable; and the following new sorts, as giving high promise,—*Beurre Goubalt*, *St. Andre*, *Beurre Superfine*, *Beurre de Waterloo*, and *Beurre de Konig*. Winter pears,—*Vicar of Winfield*, *Winter Nelis*, *Prince's St. Germain*, *New Winter Beurre*, are all very highly recommended, as well as *Easter Beurre*, for the best long keeper, and the *Pound* and *Catillac* as large productive cooking varieties. *Doyenne Goubalt* promises highly, and deserves extensive trial. *Aremberg* and *Glout Morceau* have disappointed expectation so far.

Apples.—The committee do not go into detail, but particularly commend the *Gravenstein*, *Dyer*, *Red Canada*, *Melon*, and *Northern Spy*; and also those standard old varieties, the *Rhode Island Greening*, *Baldwin*, *Roxbury Russet*, *Spitzenburgh*, *Swaar*, and [*Westfield*] *Seek-no-further*.

Curl in the Peach.

This malady, which has of late years become so formidale, causing in frequent instances, the young fruit to drop to the ground, and the lessening or destroying the crop, has induced a great deal of examination and inquiry, with very little satisfactory result. All our observations and experiments, however, point towards keeping the tree in a vigorous state of growth, by means of manure, good culture, and a free shortening-in of the branches, as being the best mode of lessening the disaster.

As to its cause, doctors disagree. Frost, minute insects, a fungus or mildew, and an epidemic like the cholera and potato rot, have all had their earnest advocates. Very careful and minute examinations the present season, during all the stages of growth, from the first protrusion of the point of the young leaf, to its full expansion, by means of a very powerful sextuple achromatic microscope, failed to reveal the least appearance of either insect or parasitic plant. All that could be seen, was at first faint discolorations of the cellular tissues, which gradually increased till the leaf became a rough, distorted mass of disease.

Rose Insects—Striped Bug.

Extract from a letter dated *Greatfield*, 7 mo. 5, 1852, "Our rose leaves have been much damaged by a small greenish (not green,) worm, which leaves the nervures and feeds on the parenchymous parts, so that the framework remains, though its verdure has departed. The other morning I threw *air-slacked lime* over them, and am strongly inclined to believe their work is at an end.

"The *Striped-bug* fares no better when he is *limed* among the cucumbers. I cannot discover that the lime hurts the leaves."

Absurdities—Cross-cultivation.

In a recent letter, a correspondent writes,—"A rose was lately taken to a sewing society at ——, which attracted much attention. It was described to me by one who was present. when I brought *Tricolor d'Orleans* from my garden, and it was pronounced the same. The report was, that it was obtained of —— ——, and that his wife had twisted the roots of a red and white rose together—that they twain became one, and this striped rose was the result.

"Well, I mentioned the circumstance to a company at my house, and —— —— declared she had performed a similar operation, (with other sorts, however,) and the consequence was a new fine rose!"

> 'Can these things be,
> 'And overcome us like a summer cloud
> 'Without our special wonder?'

"I have no doubt she believes in the truth of her statement. So do people believe that two half buds of an apple tree may be soldered into one, and make a parti-flavored fruit; and *I* am prepared to believe it,—as soon as they shall take two buds from my hand, and produce an apple, half and half, from two very different *sizes*, *flavors*, *and colors*, with a month's difference in the time of ripening.

"How is it about planting two potatoes of different colors together, [in the same hill?] It is said the offspring will be mottled! Who has carefully tried the experiment? If the Newtown Pippin roughens the bark below the graft, in the course of a year or two, why may not one potato affect another of a different color?"

Rrmarks.—We can perceive no difference in the absurdity of twisting two rose roots, or of planting two potatoes together, to produce a mixed result. Either of them strikes us as very much like twisting the legs of a black and white calf together, to produce a spotted heifer. There are but two ways in which a combination of qualities in two plants can take place. One is the production of a new variety, that is, a new individual, by means of *seed*; and the other is *cementing together* two portions of two distinct individuals, as in budding and grafting.

By seed—cross-fertilization, or dusting the pistils of one plant from the anthers of another, will produce a new individual, possessing more or less of the properties of both, *intimately blended*, so that the smallest shoot on any part of the plant will furnish a perfect specimen of the combination in any other part.

But in a union by placing the parts together, this intimate blending can never take place. The graft and the stock both retain their distinct identity. When a pear is grafted on a quince, the graft is a complete pear, and the stock a complete quince. If two halved buds could possibly be made to grow after being cut through the heart, one side of the tree would be of one sort, and the other side of the other sort. The mixture could not extend up through the hundred branches and shoots. In the case of the Newtown Pippin, (and in every other grafted tree,) the growing wood of the stock is elaborated and furnished by the leaves of the graft, and hence something of the peculiarity of the latter is imparted to the former *for the time being, and in a very slight degree;*

for let a shoot grow from the stock, and it will immediately exhibit all the characteristics of that stock, even if it has been fed from the leaves of the graft for 50 years previously.

But when two unlike potatoes are planted in the same hill, or two dissimilar rose roots twisted together, there is no connexion or communication whatever, between them. Each distinct plant receives sap from its own roots and from no other, and the leaves return the juice to its own roots, and to no other. There is no conduit or feeder across from one to the other. Consequently, no mixture can possibly take place; and in such experiments as may have appeared to favor this opinion, other causes must be looked for.

The Apple Disease.

There is in this vicinity this season a disease which attacks the apple and quince, very similar to the pear blight. It first blackens the end of the leaf, then descends to the bud, and from there to the wood, which it speedily surrounds and kills. It generally commences at the end of a limb, but sometimes it first blights a few leaves three or four feet from the end of the limb, and then works its way down to the wood and destroys it. In some cases it confines its ravages to the north side of the tree; at others to the south, and again in all its parts. We look upon its progress with no small solicitude. Can you throw any light upon the subject? R. G. P. *Palmyra, July* 14, 1852.

This malady has appeared to greater or less extent for many years past in Western New-York and elsewhere, without apparently increasing, or producing as yet any very serious result on the apple. In some parts of the western states, however, its attacks are much more virulent, and serious doubts are entertained by some whether the apple can long maintain its position as one of the fruits of the west.

Many wise heads (to say nothing of the number of foolish ones) have endeavored to "throw light" upon it, but like the investigators of the causes of the potato rot, they have instead, generally thrown darkness, and should we presume to join their company in this labor, we should certainly succeed no better. We can therefore only afford our correspondent the melancholy satisfaction of knowing that after long research nothing is yet ascertained. Eds.

Northern Spy in Ohio.

The high celebrity of the Northern Spy Apple in Western New-York, and in all places whither its crops have been sent, has caused much interest in relation to its quality as grown elsewhere. A few imperfect specimens produced near Boston, did not give a favorable impression. But it appears by a communication in the Ohio Cultivator, from James W. Weld, of Richfield, Summit Co., Ohio, that a single trial at that place has proved eminently successful. The fruit was grown from grafts set in a bearing tree, and is stated to be "*the best single variety* grown" there. "It is of the largest class. It is extremely rich and juicy, destitute of that sharp acid which the Greening possesses, having all its richness, the acid being something sharper than the Richfield Nonesuch, [or Red Canada,] having qualities to render it first rate for culinary or table use."

Curculio—the Knockings.

About *five thousand* curculios have been caught and destroyed on the grounds of the writer the present season. They were more abundant than ever known before, and they seem to be increasing in numbers throughout the country. At Newburgh, long so famous for its great and uniform plum crops, they have taken all. Yet in many places, where for many years a single plum could not be raised without protection from their attacks, the "knocking system" has saved fair crops. Single trees, at one visit, have furnished no less than *seventy-five* insects, and many half that number. These numbers become rapidly reduced by a daily use of the axe and the folding frames described in a former number of the Cultivator. Nothing but a sharp blow with a heavy axe was sufficient to bring down all, and to make clean work. The stroke was given to the short stump of a limb, sawed off for the purpose. Muffled mallets are too soft and inefficient, which is the reason why so many fail with this remedy.

Fruit Trees.

Fruit trees, which are among the ornaments, as well as useful productions of nature, are too much neglected by farmers at large. What beauty is there in a well trimmed apple tree, with its blossoms of pink and white so nicely blended, and later in the season, scarcely less beautiful is its load of rich and golden fruit!

Aside from all considerations of beauty or profit, there is another motive for the cultivation of fruit, which should influence parents, who regerd the morals of their children. If you have good fruit in your own garden, there will be no inducement for your children to break the command "thou shalt not steal." Is not this a reason strong enough to induce any upright man to plant and rear an orchard?

All the varieties enumerated in nursery catalogues, are not requisite for the farmer of small means; a few choice and well selected sorts, are better than a host. In this manner, by a little exertion, an orchard of fruit may be raised, at little expense and trouble. As our large cities are dependent upon the country for their fruit, and are willing to pay a good price for it, this branch of business commends itself to the farmer as a means of profit. The crops which may be obtained at the same time fruit trees are being cultivated, will more than pay for the entire expenses of culture, and roots crops are far better for the trees, than such as mature above ground.

In the month of April I transplanted apple, pear and plum trees, and as the soil they were removed to was richer than that they had previously occupied, they did not know of their change of place—this should always be the case, or else the growth will be much retarded. Trees need cultivation as much as corn, and will pay for it proportionably well. By good cultivation, trees may be made to bear from the seed in six years. A Subscriber. *Taftsville, Vt.*

A Glance at the July Horticulturist.

The leader gives a few good suggestions "*how to popularize the taste for planting*," and prescribes a remedy by which he hopes our big farm, washed now on each side by the two oceans, may be made to wear something less of the air of Canada-thistle-dom, and show a little sign of blossoming like the rose. The influence of private individuals of rural taste, and of nurserymen, is chiefly looked to as the means which may be best exerted to produce this desirable reformation. Private individuals, by giving away a shrub or a tree occasionally to each of their neighbors who will take care of it, may thus do much to increase the desire for ornamental planting among those neighbors—for which purpose it is proposed to devote a day or two each year, by those who have public spirit enough, to propagating suitable sorts. Will nurserymen grumble at this? They need not, for instead of supplying *their* market gratis, this will only increase the avidity for such things as *must be had,* and cannot be had as gifts. Nay, more, the nurserymen themselves, if they are not too stingy, are urged to undertake the same generous task, bestowing their gifts rather sparingly to each than otherwise, as one or two plants or trees well taken care of, are better than more when neglected. We have practiced to some extent on this plan, but found one difficulty, which was, that which cost nothing was generally little prized. We therefore improved on the mode, by requiring *pay* in all cases where good cultivation was not given, and making this a provision in advance.

The opinion is confidently expressed in this article, that more trees have been planted in the last ten years within fifty miles of Rochester in this state, than in any three of the southern states taken together.

Prof. Turner and Pear Blight.—The article on this subject, noticed in our last, has brought out A. H. Ernst of Cincinnati, who confidently affirms that the Professor's fearful insect has been long known, and has no connexion whatever with pear blight.

The Seasons in Maine.—Some very interesting facts are presented in a communication from Wm. Wallis of Portland. The severity of the past winter was generally observed through the country, but as that severity was more uniform than at other times, the effect on vegetation was not so unfavorable as in some milder winters. The thermometer sunk to 16° below zero at Portland, yet the Osage Orange "appears not to have suffered in the least," nor Weigela rosea; and the peach trees were reported as in full blossom. Similar results were observed at Macedon, in Western New-York, where the mercury sunk to 12½° below zero. A large portion of the fruit buds of the peach escaped; the Ribes sanguineum was uninjured even to the tips of the branches, and the Bignonia grandiflora, wholly unprotected, is now pushing out shoots three feet above the ground.

The same communication gives extracts from a record of the weather kept at Portland, for a century and a quarter, by which it appears that during all that time there has been no change whatever in the average period for the blossoming of fruit trees—notwithstanding the conflicting opinions that the seasons are becoming colder, as adopted by some, and that they are becoming warmer, as adhered to by others.

Fruit Culture at Washington.—R. G. Pardee gives some interesting memoranda of his visit to the grounds of Dr. Bayne, in Maryland, eight miles from Washington. The Doctor has over 15,000 fruit trees, of which 8,000 are peach trees, and the crop very great. Several acres are in strawberries; the earliest sold at $1 per quart; four days later they fell to 50 cents, and four more, to 25 cents. Pear trees on the hill tops, are free from blight, while those in valleys are badly affected.

Grape Houses.—A skilful grape culturist at Boston, recommends *for the north,* a house placed east and west, fully exposed to the sun, and glazed all round, ends and all.

Transplanting.—The editor very justly remarks, "If it were made a rule in moving trees, always to reduce the last year's growth to *one bud,* half the failures in transplanting would not occur—because the head and roots would be brought at once to something like a balance of power. Shortening-in and mulching transplanted trees ought to be followed as established practical rules, in this climate, in transplanting every deciduous tree needing more care than a willow."

Cyprus Vine.—We are told that one thing only is necessary to make the seeds of this annual vegetate freely, and that is to soak them over night in *milk,* blood warm when put in.

Rival Hudson Strawberry.

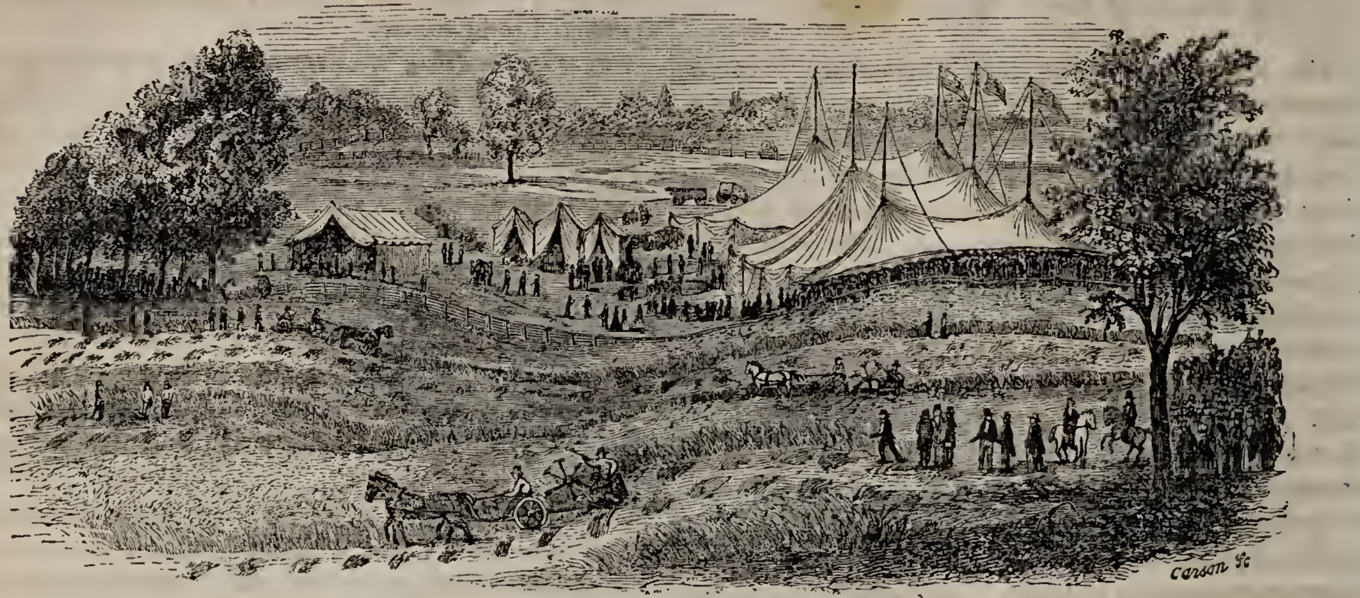
This new variety is gaining a high reputation for its productiveness and general value, although not of the highest quality for the table. It is one of the best late sorts, and is fine for the market or for preserving. A correspondent of Moore's New-Yorker, says that a single neglected plant of last year's growth, accidentally overlooked till full of ripe fruit, was found completely surrounded with trusses of berries, on which one hundred and thirty-three ripe ones were found, proceeding from this single root.

Extension of Tree Roots.

We have often had occasion to point out the uselessness of digging small circles of the ground about large fruit trees standing in grass. The Mass. Ploughman says, "Last week we plowed a few furrows in the road-side under apple trees that had been set but five years, and we found roots in plenty, at a distance of ten feet from the trunks of the trees."

Productiveness of the Lombard Plum.—This variety, otherwise known as Bleecker's Red, although not of the highest flavor, is well known for its great productiveness, and its especial adaptation to light soils. A correspondent of the Prairie Farmer, who has very successfully cultivated it on the wild plum stock, states that one tree, "which had been set four years, was judged to have five pecks of plums."

Looking Glasses to Frighten Birds. — We often see the remedy of suspending looking glasses to frighten birds from fruit trees, going the rounds of the newspapers, and lately we have seen the same thing copied from the London Gardeners' Chronicle. From our own experiments in this line some years ago, we were not favorably impressed with its efficacy, the birds being about as much frightened, as a locomotive by an umbrella.



View of the Grounds and Trial of Reapers in the Barley Field, July 22.

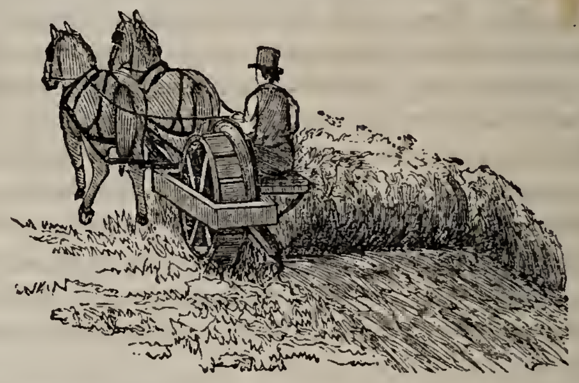
Trial of Agricultural Machines at Geneva.

The trial of agricultural machines took place on a large farm two miles south-west of the village of Geneva, under the direction of the New-York State Agricultural Society, during the six days from the 20th to the 26th of 7 mo. (July) last. The importance of such a trial has long been felt, and the interest in its results was manifested by the hundreds in attendance, chiefly of the most intelligent farmers of that region, during the busiest season of their labors.

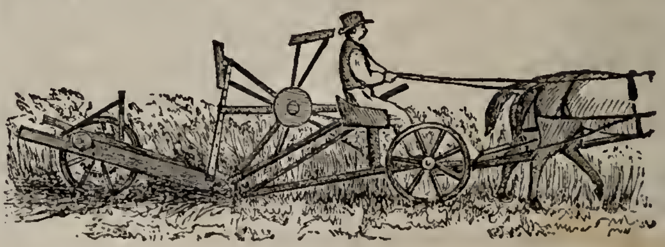
Our State Fairs have for many years exerted an excellent influence, by showing to the whole community the best implements and machines from the most skilful manufacturers, and serving to introduce them into many neighborhoods where they where before quite unknown. The benefits thus conferred and the improvements introduced are almost beyond estimate. Yet a great deficiency was felt in not seeing these machines and implements in actual operation; they may have a very promising appearance, but shrewd farmers, who dread humbugs, are not satisfied with simply gazing upon them motionless. Practical trial alone reveals the difference between a mower which will cut freely and shave like a razor, and another which chokes, tears, and slides over the uncut grass. A remarkable instance of this sort occurred in the case of McCormick's reaper, remaining on exhibition at the world's fair, which afforded abundant sport to the London Times, as a cross between Astley's chariot and a flying machine, until by the demonstration of actual trial, it elicited the admiration and astonishment of the British people. Some instances of an opposite character have also occurred, which it would be rather ungracious to mention. For such reasons as these, we are induced to regard the exact and thorough experiments made at Geneva, although not of a showy character, of eminent utility and of the highest importance, even if accompanied by some imperfections necessarily consequent to what is new.

The Mowing Machines.

The whole of the 20th was occupied with the trial of mowing machines, in the presence of nearly a thousand spectators. The meadow was rough, and the crop much too light generally for a fair trial—the small wiry grass was a severe test for the cutting powers of the several machines. Ketchum's from Buffalo; McCormick's, from Chicago; Manny's, from northern Illinois; and Rugg's, from the same region,—were successively tried. Ketchum's was much approved for its simplicity of construction, and the clean cut which it made, shearing off evenly all before the sweep of its blades. Its swath was nearly five feet wide, and was laid with perfect evenness over the whole surface of the ground, and entirely obviated spreading. The only objection we heard was not cutting sufficiently close to the ground, but several farmers remarked that taken as an average it was done as well as men could be hired to do it by hand. McCormick's did not succeed so well, cutting neither so clean nor so near the surface, but in heavier portions of the meadow, its work was good. It swath was six feet.



Back view of Ketchum's Mowing Machine in operation.



Manny's Mower.

Manny's "Northern Illinois Mower" was next tried, and did its work in beautiful style, fully equalling, if not excelling Ketchum's, cutting a swath over five feet in width. The general opinion was that it was of quite easy draught to the horses, but this point could be determined satisfactorily only by the dynamometer, which the committee carefully applied to each machine, and the results of which will be embodied in their report. This mower possessed the decided advantage of admitting a quick and easy elevation of the cutting blades, (situated midway between the forward and hind wheels,) on approaching any obstruction.

Fig 1

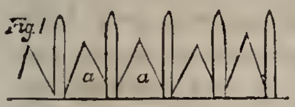


Fig 2

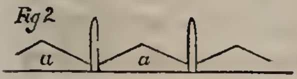
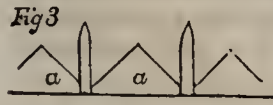
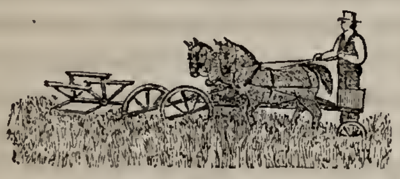


Fig 3



We could not but observe the different form of the blades of each of these three mowers. In Ketchum's, they were acute-angular, as shown in Fig. 1, so that, although they had but a simple *cutting* edge, (and not a sickle or sawing edge, as the others,) they did their work completely, not a stalk of grass could escape them as they quickly vibrated between the steel fingers. Even when a part of the cutters had accidentally become badly dulled against a hidden stone, we observed that none of the grass was left—it was pinched off if not cut off, and a smoothly shorn surface left. This appears to be a decided advantage, an increase in draught being the only result from dull knives. McCormick's, which has the sickle edge, is quite unlike in form, the angles being obtuse, as in Fig. 2. This appears to furnish the reason why this machine, which operates so admirably as a reaper, partially fails in the meadow, where the slender, polished surface of small wiry grass is operated on by the simply *sawing* and not shearing motion of the blades, but is bent down before them. In Manny's mower, which cut so much better than McCormick's, the angles were more acute, approaching in form those of Ketchum's. (Fig. 3.) Rugg's machine differed from all the rest in being directly propelled by the horses behind. Its cutting apparatus was similar to that of McCormick's, and it cut grass quite as well. It required more skill in driving, but less speed than any of the others, which was perhaps owing to the greater multiplying power of its wheels.



Rugg's Propeller.

The next morning, two more machines were tried—Burrall's, and Bronson & Murray's. Burrall's is quite similar to Ketchum's, and cut remarkably well with the exception of becoming frequently clogged—a difficulty which may be yet obviated, as it was then on its first trial. Bronson & Murray's, being out of order, did not succeed well.

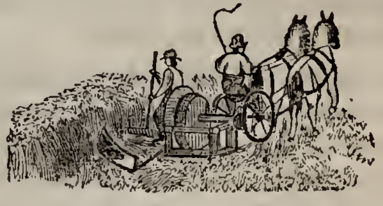
Another trial of most of the mowing machines, was made in a heavy meadow, on the morning of the 23d On the lower portions the ground was rough, and the grass largely mixed with sedge and juncus, rendering it hard to cut. Ketchum's and Manny's machines did their work well, and cut closely to the surface. McCormick's, Bronson & Murray's, and Danford's, did not succeed so well. The latter was now tried for the first time. Its cutting apparatus was quite different from the others, consisting of two sets of knives, vibrating in opposite directions, and operating like double edged-shears. High hopes had been entertained of the success of this machine, but they were not realised. This may have been owing partly to the absence of fingers to gather and hold the stalks, and to keep the edges from being crowded asunder. A portion of the grass on this meadow was completely prostrated, and here the superiority of the mowing machine over the scythe, was most strikingly exhibited. Against this lodged portion Ketchum's mower was driven—it left the grass in appearance precisely as it was before, but it was found on examination to be shaved off closely to the surface of the ground, without altering its position.

A single trial like this, can hardly be considered as a decisive exhibition of the relative merits of the different mowers, where so much may depend on the nature of the ground and grass, the character of the team, driver, &c., while the liability to wear and tear will not be shown by the work of one day only. One point, however, was satisfactorily settled,—the practicability and great advantage of the use of mowing machines on large farms, where one person with a single team, can easily accomplish the severe labor of ten men. Indeed it was a matter of surprise to many, that while grass cutting by hand is much slower work than cradling, reapers requiring two men each, should be so much more generally introduced than mowing machines, which cut nearly as many acres per day, with but one man each for their management.

One defect appears to exist in nearly all the mowers—that of requiring unnatural speed in the horses to do the work well. The motion of the knives should be so multiplied as to accomplish the desired end with two miles an hour, instead of four. Excellent teams were purposely procured for all on this occasion, and the experiment can hardly be regarded as a fair one for ordinary everyday work.

The Reapers.

The trial of these was commenced in the afternoon of the 21st. Burrall's, of Geneva, first entered the harvest field, and cut in fine style, sweeping down a sheet of the standing grain about five feet wide, and throwing it off in handsome bunches for binding. It could be so arranged as to drop the grain either directly behind, or off at one side, the latter being the best arrangement, as not requiring binding and clearing the track before the horses could again pass round the field. This machine, which appears to be much like Hussey's, possessed one advantage, which appeared to be an important one. By each vibration, the knives were made to pass two sets of fingers, instead of only one, as in the others, cutting twice as much at each stroke, striking more rapidly, and rendering a change of motion less frequent. Hussey's machine was next tried, and its operation was fine, quite similar to that of Burrall's, dropping the grain behind the machine. Neither of these machines was furnished with a reel,

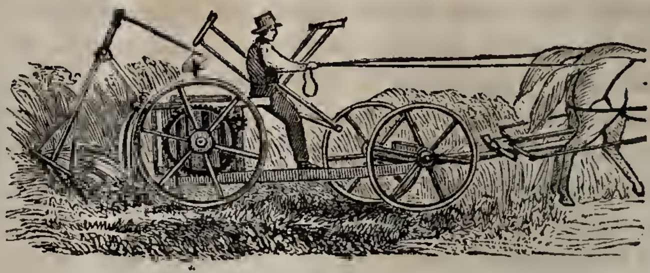


Burrall's Reaper.

which may have been the reason that it was necessary to drive the horses at a rapid pace, too much so for all-day work with ordinary teams. Rugg's propeller did not succeed well, and was soon withdrawn from the field. Manny's Northern Illinois Reaper, a slight modification of his mower, which cut so well upon the meadow, succeeded equally well as a reaper. The grain was thrown off at the side. This was thought by some who witnessed its operation, as the best *combined* machine, or for using both as mower and reaper, although for the latter purpose alone, it hardly came up to some others. It may not prove practicable to combine these two qualities to the best advantage in one machine, but it is certainly well worth the attention of inventors; for while the cost is from $110 to $135 dollars, farmers will not be willing to purchase two, when one can be made to answer the purpose. We do not perceive, however, why the price should be nearly so high.

Densmore's machine, from Brockport, excited much interest. Its construction is not unlike McCormick's, with the addition of a self-raking apparatus, which suddenly throws off the grain at one side, as soon as enough has been cut for a bundle, thus saving the labor of one man, required with the others, to rake off by hand. Some improvement is needed, however, in this self-raker; in light erect grain, it lays the bundles tolerably well, but when heavy they are often spread in streaks. One of the best machines in the field was McCormick's—like Manny's and Dinsmore's, it cut about six feet wide, and in execution was not exceeded by any, especially in "lodged" grain. Seymour & Morgan's machine, from Brockport, cut well, but like some others, did not clear well, which might be owing to the inexperience of the raker. All these reapers appear to be quite similar in principle, if not in construction; Burrall's and Hussey's being furnished with acutely formed cutting edges to their knives, and without reels; and all the others possessing sickle-edged cutters, and the machines furnished by reels. The vibrating knives and the reels appear to be both quite old inventions. Hussey's, McCormick's, and Burrall's appeared to be the favorite of this day's trial.

On the 22d, Danford's double-edged reaper was put in operation—its principal defect was not cutting off the straw well, probably in consequence of having no fingers to gather and hold the grain, and to keep the blades in close contact while working together. In other respects, it was a neat and compact reel machine. At the same time, the self-raker presented by J. S. Wright, of Chicago, was tried—it was truly an extraordinary curiosity, and excited the highest interest. The self-raking machine (attached to Hussey's reaper,) is the invention of J. Atkins, of Chicago, a person of great ingenuity, as this contrivance fully testifies. The rake sweeps the bed where the fallen grain is deposited, presses it against a toothed plate, and both, holding firmly the bundle of grain thus collected, swing round the quarter of a circle off behind, when they open wide, and drop their contents in a neat bunch upon the ground. All these motions are accomplished by a very simple piece of mechanism, and they seem so nearly the immediate result of intelligence, that this machine was generally called by the name of the *Automaton Reaper*. Its invention is quite recent, and it had scarcely ever been used before, and hence owing to an accident it did not succeed the first day of its trial. It was however repaired, a temporary reel attached, and tried again on the 23d with entire satisfaction, proving decidedly the best *self-raker*, on the ground. With further experience, it may become a great acquisition. If a good self-raker can be brought into use, it cannot fail to be adopted, for farmers will be quite unwilling to employ two hands to man a machine that will work equally well under the care of one.


Atkin's Self Raker.

The afternoon of the 22d was occupied with the reapers in the barley field, a piece of ground still more uneven than the wheat field. A first rate *cradler* had laid several swaths to divide the measured portions or acres; it was observed by all how greatly superior was the operation of the reapers, in evenness, in not leaving a straw behind, and in the precision with which the bunches were deposited. Several machines were tried, and all, or nearly all, did their work in the most finished manner.

On the whole the trial was a complete triumph of machinery over hand-work, for both mowing and grain cutting, and when machines shall be perfected, simplified, and rendered much cheaper than at present, mowers and reapers must become as indispensible on all farms of much size, as horse-rakes, plows, and thrashing machines. Out of the many hundreds who witnessed the trial, we heard only a single adverse expression, from a strong boned, rough looking laborer, who remarked in an undertone, when he saw the partial failure of the most defective machines, "I want nothing better than a good cradle!" Doubtless, had he witnessed the first experiment with the cast-plow, he would have exclaimed, "A good spade is enough for me!"

Thrashing Machines.

Experiments were made on the 23d and 24th to test the power and efficiency of horse-powers and thrashing machines. A most ingeniously constructed dynamometer, in possession of J. E. Holmes, of Mass., one of the committee, exhibited with mathematical accuracy the speed and resistance at the same time. Unfortunately, this elegant instrument was found not well adapted to the degree of velocity and force existing in thrashing machines, and after a few trials it was found necessary to discontinue its use. The committee were therefore compelled to depend on other modes of determining the power, such as counting and weighing the sheaves passing through each machine in a given time, measuring the thrashed grain, using the same pair of horses, operating by their weight on the endless-chain powers, ascertaining the degree of friction in each, by measuring the angle of inclination required for a given weight to put each in motion, &c. Our observations were not sufficiently minute to enable us to point out which machines promise the greatest efficiency; but we could not fail to observe the extraordinary difference in the manner of running. Some were so imperfectly made, and their centers of motion so badly combined or connected, that their tremor, oscillation, and noise were prodigious; while others ran with a steadiness, precision, and quietness, that was admirable,—nothing was scarcely to be heard but the shrill hum of the cylinder, and the whistling of the grain and straw as it shot through the machine. Among the latter we observed H. L. Emery's patent, exhibited by Emery & Co. of Albany, and that of Eddy & Co., of Union Village, Washington county, N. Y. Others equally good may have escaped our notice.

Drills, Cultivators, &c.

Several of the best grain drills were tried, but opportunity was not afforded to decide understandingly upon their merits, by simply witnessing their operation. They were thoroughly examined by the committee, whose report will soon be made known. The same may be said of the cultivators, and the new contrivance for cultivating wheat in drills, attached to Seymour's Sower. A gang-plow, from Scottsville, N. Y., consisting of four moldboards attached to one beam, connecting two wheels, and on which the whole was supported, and the width of which could be increased or diminished, by a simple and ingenious contrivance, was the best thing of the kind we have seen. With three horses, it easily and neatly inverted the surface of barley stubble, turning a strip of ground three and a half feet wide at a time. Such an implement as this would certainly prove a great saver of labor with farmers generally. Several cast-steel plows were exhibited, and some of them successfully tried in a plowing match under the direction of the citizens of Geneva. One made by Prouty & Mears, did excellent work. If plows of this kind could be made hard enough to last as much longer than cast plows, as they exceed them in price, (about one-half more,) their superior lightness and strength, and their diminished friction on heavy soils, would render them most economical for ordinary use. Future experiments must determine these points.

We must not close this report without mentioning, among the articles exhibited in the tents, Salmon's improvement on Booth's Grain Separator. A mixture of equal portions of wheat and chess were passed rapidly through, and a complete separation of the two kinds of seed effected at one operation—not a single grain of chess could be detected among the wheat, by a very careful search. This result was produced by the strong current of wind made to sweep upward against the falling seed, sufficient to carry off all the chess, but suffering the wheat to pass. A persevering use of this machine for all seed wheat, would, in connexion with good farming, soon do away the very common opinion, that this weed springs up from grains of wheat, some farmers having already succeeded in entirely driving it from their farms.

We cannot conclude without expressing the hope that this trial is but the precursor of others, which shall by further experience, be conducted with such precision and accuracy of measurement, that none can dispute the decisions of committees for correctness, as we trust is the case in the present instance, so far as they have gone.

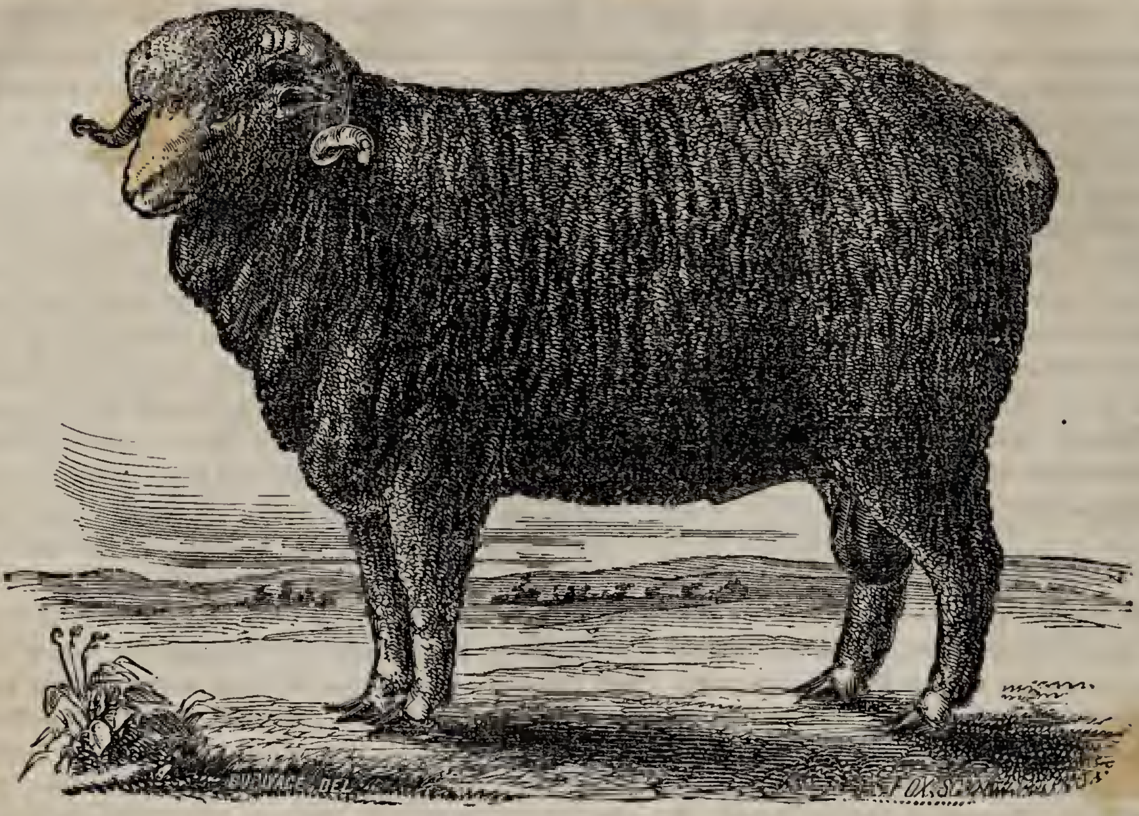
Osage Orange Hedges.

Messrs. Editors—I read an article in the Ohio Cultivor some time ago, on the cultivation of the Osage Orange as a hedge plant, written by Byron Jackson. I like Mr. Jackson's mode of cultivation pretty well, but I differ with him somewhat, notwithstanding. He cuts the plants off about two inches above the ground, when they are first set out, which is about right; the next year he cuts them off one foot above, which I think is too high; next year two feet, and gives it three cuttings, one in the spring, one in July, and one in September.

Now let me give you my plan. I set out 16 rods in 1848, as an experiment. I cut it off about three inches above the ground—plowed, and kept it hoed clean. Next spring, 1849, I cut it off about seven inches above the ground—plowed and hoed as before; and in June I cut it off to 13 inches. In the spring of 1850, I cut down to 21 inches, and in June cut it down to about 30 inches. I do not trim mine but twice a year. I trimmed it once in March, about the usual time of trimming apple trees, and there came a cold spell of weather soon after, and several of them died, and I supposed that to be the cause of it. I think they ought to be cut pretty late in the spring, and not more than twice a year. If cut more than that, the growth will be so small that they will be almost sure to freeze to death; however, I have never lost but two or three plants by freezing, and they were in a low piece of ground, where a small ditch ran through the hedge. The first season the ends of the shoots froze from one to two feet, but they are injured less every winter, and thus far, this winter, they are scarcely injured at all, and the mercury has been 24° below zero. I have cultivated mine every year, so far but do not intend to this season. It is now about eight feet high, and five feet wide, (but must be cut down some in the spring,) and will turn all kinds of stock except chickens; they will hunt some little open places at the bottom, and creep through, but by another season I think it will turn them too. I have about 30 rods of the Virginia thorn, planted in the hedge row last spring; it is from two to four feet high now, and does look splendid. I think the Virginia thorn will make the prettiest hedge, and I dont know but the best one—but it takes it so much longer to grow, that I rather prefer the Osage Orange. I am much pleased with hedging, and intend to surround my orchard with plants for an efficient hedge next spring, nothwithstanding Mr. Wilkinson gives it some pretty heavy knocks. J. H. Claypoole. *Fort Madison, Iowa, Feb.* 1852.

Beef Trade at Chicago.—The Prairie Farmer asserts that more than half the beef butchered in the United States, is packed at Chicago—and that in 1850, the amount had reached 50,000 barrels.

Cost of Silks.—About *thirty six millions dollars,* including duties, commission, profits, &c., were paid in 1851, by the people of the United States, for imported silks.



Portrait of a French Merino Buck,

From a daguerreotype by W. H. Gilman.

This animal was bred by Mons. Cugnot, of the department of Seine et Oire, France, and owned by S. W. Jewett, H. S. Morse, and O. F. Holabird, of Vermont. Mr. Jewett has imported, during the last year and this, 583 of the pure bred French Merinos, at a great cost, selected by himself, from the three best flocks in France.

Breeding Stock.

Messrs. Editors—It is with pleasure that I have read the remarks by "one who six days in seven wears *thick boots*," upon the above subject. I have no doubt that he, and those of his class, will, by careful observation, and their habits of judging for themselves, be able to arrive at the truth, when this cannot be attained by abstract reasoning; and it was for the purpose of directing their attention to a matter of deep importance, that I wrote the article published in the May number of the Cultivator.

I now write for the purpose, not of getting up a controversy with one who does not choose to adopt my views, but to correct some errors which it appears he has fallen into, in regard to the legitimate deductions which may be drawn from what was written in that article.

In the first place it is of no practical importance whether the peculiar *influence* which causes the offspring of animals to differ from their parents, be a contamination of the mother, by means of former pregnancies, or if this change be the product of an active *imagination*. If the *result* is proved, it is immaterial as to its source, so far as the propriety of guarding against a similar failure in the future is concerned; but to guard against disappointment, it *may* be necessary to ascertain their source beyond doubt. Although it may well be doubted whether the imagination can extend *beyond* the period of conception, as it must have done in *every* instance cited in the article referred to, it is now too late to deny the correctness of the observations made. Many, very many more might be adduced, in regard to the domestic animals, than were presented in May, but it is supposed they must be sufficient; yet, as a matter of interest to all, I will venture to occupy a little space in referring to similar instances among *mankind*. Prof. Simpson, of Edinburgh, Scotland, says:

"Mrs. ——. a neighbor of Mr. McCombie, was twice married, and had issue by both husbands. The children by the first marriage were five in number, of the second three. One of these three, a daughter, bears an unmistakable resemblance to her mother's first husband. What makes the likeness the more discernable is that there was the most marked difference in their features and general appearance, between the two husbands."

Again, Dr. Simpson writes:

"Dr. George Oglevie, of this city informs me of a case which fell under his own observation, where a woman was twice married, and had children by both husbands, and when the children by both marriages were scrofulous, although only the first husband had marks of that diathesis, the woman herself and her second husband, being to all appearance quite healthy."

A similar case was communicated to Dr. Harvey by Professor Pirre, of Aberdeen; and many others still may be found recorded among the writings of physicians who have had no interest in presenting anything but the truth to the public.

Dr. Harvey remarks of these cases, that—"before the mother could have imparted the scrofulous taint to her offspring by the second husband, she must herself, have imbibed it from her first husband, through the medium of his offspring while in utero. And, although still seemingly free of the taint, it may have required only the appropriate external condition to call it into full activity in her own person. And, with regard to the syphilitic poison, (imparted in a similar manner, according to cases cited, but not quoted here for the want of space,) there is no difficulty in understanding, and it is quite within the bounds of probability, that the foetus if contaminated with it, by its father, may convey it to its mother."

Many instances can be cited like the peeled rods of Jacob, to prove the influence of *imagination;* but in all cases the impression has been made either at the time of conception, or subsequent to that period; but in all the cases above referred to, the impression, whatever may have been the cause, must have been antecedent to that period.

It was not the design of the writer, neither of the authors quoted by him, to convey the idea that in *every* instance where she had borne offspring from more than one male, that all her young *must* resemble the one she was first served with, but that such resemblance *might* occur; and to guard against this possible source of disappointment, its source was designated. If the *mind* alone, receives the impression, then the necessity still remains to have the female *first* impregnated with the same animal, or the same breed of animals, that it is desired her offspring should resemble. If Mr. "Thick Boots" has a nice bull, whose services are cheap at $5, and some of his get are not as good as he could desire, would it not be for the credit of his animal, to be able to show that the blame rested with the previous management of the cow, and not in any want of certainty or purity in the blood of the male?

It strikes me, that in this way only, can we account for the many inferior animals, the product of well bred horses and cattle. "The true course for farmers will be to send their cows to well bred males," no doubt, and then, if they are disappointed in their calves, not to rail against all improved breeds of stock, but to remember the liability of all animals to the sources of disappointment I have endeavored to call their attention to; and then by beginning aright, they may be almost absolutely certain of success, and of pecuniary reward.

A few words in regard to myself, and I have done. Many farmers have supposed no one but those who follow the plow, and wear *thick boots*, can know anything about farming, and if anything is said by outsiders, it is scouted as mere *theory*, and unworthy thought or attention. This, doubtless, has deterred many in my profession, as well as of other callings, from writing for the Journals, and thus valuable thoughts have been lost for the time, to the world. The truth probably, is, that a thoughtful and observant country physician, especially if he has first learned the art of farming, as far as it can be learned by working on a farm during his entire minority, as I have done, will see more correct, and more erroneous farming, in the course of one season, as he is riding in the course of his practice, than the laborious cultivator of the soil would be able to observe in ten years time; and therefore would he feel some degree of confidence in presenting the results of his observations and reflections to the public, without, however, writing "as one having authority." Most people care nothing in regard to the wearing apparel of those who write for the Cultivator, and could I have done so with propriety, I would gladly have allowed them to remain in ignorance, in regard to my calling; but since the matter has been brought prominently forth, I do not hesitate to admit that I am *not* a practical farmer, and yet I profess to know *how* much about the farm should be done. C. H. Cleveland. *Waterbury, Vt., August,* 1852

Borrowing Tools.

It is an old saying that "he that goes borrowing, goes sorrowing;" and a still older one, "the borrower is servant to the lender." But so far as applies to farm tools, yankee ingenuity seems to have reversed these sayings, for one of the greatest annoyances of some neighborhoods is the necessity for lending tools. "Won't you lend me your cart to-day?" "I wan't to borrow your crow-bar" —"Can't you let us have your drag?"—"Are you goin' to use your old mare to-day?"—"Father want's to get your oxen"—"I wan't half a dozen of your new bags," &c., are usually followed with long searches for lost bags, half days spent in getting carts and harrows repaired, &c. "Why, father, Mr. Dumplin said he would *pay* for that cart, if you would get it mended." "He would, indeed, would he,—this would cost him about one-fourth of my loss of time in going to him for it, and taking it to and returning it from the blacksmith shop, to say nothing of three days delay in getting my work done?" "But, father, you know that's a great deal better than Mr. Sugarplum did when he borrowed your cultivator, for when he broke it, he swore at you behind your back, for lending him such a 'rotten machine,' and wouldn't never pay a cent."

"John, where's the crowbar?" "I don't know sir, I've hunted for it a good deal for two or three days." "Have you looked in the barn?" "Yes, I hunted all through the barn, and the carriage-house, and the corn-house." "Have you asked Jim?" "Jim haven't you seen the crow-bar no where?" "Why, yes, I saw it at Squire Noodle's; he borrowed it one day when you was gone away, to pry up a bar post, and its been stickin' there ever since."

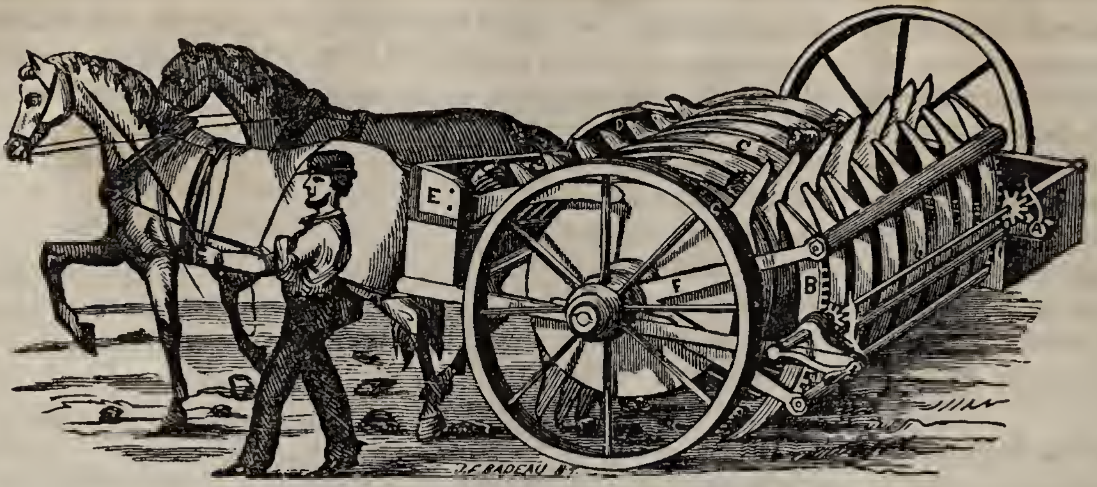
Every farmer should have a full set of implements and tools, AND HAVE A PLACE FOR EVERYTHING, AND EVERYTHING IN ITS PLACE. If he has not the means, let him sell off a corner of his farm to procure them.

Information Wanted.

Manure Cellars.—Please insert the following in the columns of the Cultivator.

Can any one favor me with information in relation to *Manure Cellars*, by describing a plan, materials for wall, &c.,—also size and cost for a farm of one hundred acres of cleared land. The amount of stock designed to be kept, is enough to consume *all* that is raised. B. *Glenn, July* 21, 1852.

Family Ice-House.—I would ask for information through your journal, as to the best method of constructing a small ice house, from 10 to 15 feet square. I am aware that our large establishments, on the Schuylkill are built entirely above ground, and my object in this inquiry is to know whether ice will keep better in that position, or below the level of the earth, and what kind of protection is necessary in either case. R. R. Wright. *Philadelphia.*



Machine for Picking Stone.

This machine was recently invented and patented by Mr. J. T. Foster, No. 47 Dey street, New-York, who is well known to the mechanical community for several of his previous inventions. The great utility of such a machine as here represented, will be readily appreciated by every farmer, and will open a new era in farming. It is calculated to clear of stone from 7 to 10 acres of land per day, with the aid of a good team of horses: making a saving of at least 200 per cent over hand labor, and does the work effectually, leaving no stone in its track, and completely harrowing the ground.

To describe the machine more fully, we refer to the above wood-cut. Letter C represents a cylinder containing four rows of teeth, or lifters; this cylinder is secured to the axle, and is made to revolve by the friction of the wheel G, which is also secured to the axle, the other wheel running independent to accommodate itself in turning. B represents the rake held in its place and supported by the arms F F, through which the axle passes, by which means the rake hangs on the centre of its own circle, which is enough greater than the cylinder to admit a stone of the size of a peck measure to pass between, and is capable of being adjusted by the crank and shaft seen just behind the rake, not indicated by letter, and held in its required position by the dogs or palls A A. It will now be readily perceived that as the machine moves forward, the rake collects everything that is not capable of passing between the teeth which are but three inches apart, and at the distance of every four feet, the rake is relieved of what it has accumulated by the revolving lifters, which convey them into the hopper E, which is on a sufficient angle to allow them to roll in the box D D, when the box has accumulated a load, the driver, by turning the crank, raises the rake to a height to clear any obstacle that might be in the way, locks it, drives off and dumps as with an ordinary cart, and is ready to repeat the operation by simply dropping the rake.

A machine to pick up stones we have ever considered among the last of inventions, but now we have a simple, efficient, labor-saving machine. Why was it not brought into existence before we endured so many days of backache? It is all right; successive generations must share in trials and blessings. This machine is well adapted to picking apples, but more especially for digging or harvesting potatoes, and while doing this, as well as picking stones cultivates the land. We deem this invention of great importance to the farming interest, and one of those that will afford the facilities to practical agriculture that are requisite to place farmers on a footing with those in other arts of life. Every considerable improvement in the labor of the farm has an important bearing in national prosperity and the general interest of humanity. C. L. Barritt, Solicitor for Patents, sole Agent for the disposal of Rights, &c., No. 252 Broadway, (room No. 10,) New-York, where a working model may be seen. *N. Y. Artisan.*

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Rural Taste.—"Imagine for a moment what a difference it would make in the pleasures of the country, in the pleasures of every one who ever goes into the country, if the fertile valleys, the rolling and wooded uplands of our noble state, instead of being marred and deformed as is often the case, by the hand of ignorance and indifference, were embellished by taste and art. If every farm house were itself an object of beauty; if every cottage pleased the eye, if the fertile and well managed fields, the ample barns, the fine cattle so often seen, had in the home of the farmer, its garden and lawn, its trees and flowers and shrubbery, its neatness and order, their appropriate and becoming crown and ornament. All this might easily be, with scarcely an additional expense, if the desire and taste were not wanting. A symmetrical, well-contrived house costs as little as an awkward and inconvenient one; colors which harmonize with surrounding objects, are as cheap as glaring white; flowers and a smooth lawn around a dwelling require but little attention or money, and as for trees, the noblest and most beautiful for shade or ornament, the oak, the elm, the maple, the beech, the chestnut, the tulip tree, the ash, the hickory, the hemlock, the pine, and many others are the growth of our native woods. They are sent annually to embellish English parks, and every farmer here can have them for the trifling labar of transplanting them.

The materials for producing scenes of beauty, for adorning the country, for increasing the charms and attractions of the home, being thus cheap and abundant, no one is excusable who neglects to use them. Whilst the chief object of the farmer's attention must be and should be the increase of his crops, the care of his cattle, the adding to his yearly profits, he still has time enough and he ought to have spirit and soul enough for other and higher objects, the improvement of his mind and the cultivation of his taste.—*Fisher's Address.*

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How are our Stock to be Wintered.

Eds. Cultivator—Through a large portion of country, hay and fodder is scarce. Every farmer who has been in the habit of keeping a regular stock, will deeply regret the necessity that is before him, of selling off this fall at low rates, and buying again in the spring at proportionately high ones. Nothing could be more acceptable to many readers of the Cultivator, than information on the subject of wintering sheep, cattle, and horses, under such circumstances.

We know that much may be done by feeding cut straw, with provender, &c., to cattle and horses; yet to many the subject will be so new that it will be a matter of experiment. Information respecting the various kinds of coarse feed, bran, &c., the method of using, commencing with the beginning of the time of foddering, would be to the point. The use of grains, screenings, &c., obtained at breweries—the feeding of "sprouts," to other stock than cattle—the use of oil cake; in fact anything on any of these or kindred subjects would be of interest.

Are there any works published on these subjects that are reliable. [We know of no work which will supply the information desired. Ed.] T. T. C. *Chatham, N. Y.*

ANSWERS TO INQUIRIES.

Leaves of Rhubarb Poisonous.—J. C. C. is informed that the leaves of the Rhubarb or Pie plant, are poisonous. A few years ago, in the spring of the year, our pie plant being rather scarce, a friend told my wife the leaves of the plant were as good for pies as the stems. For trial she made one pie of the leaves, which was eaten by the family, seven in number; and the result was, it made us all sick, except two Irish laborers which belonged to the family, one or both of whom eat of the pie, but would not acknowledge that they were effected in the least. B. *Goshen, Ct.*, 1852.

Mowing Machines.—W. L. R., Babcock Hill, N. Y. You will find the information you want, in the account of the trial of implements at Geneva, given in this number. For information in relation to the contrivance for unloading hay, see Cultivator for June.

South-Down Sheep.—H. B., Bethlem, Ct. There is but one genuine breed of South-Downs. Different animals of this, as in all other breeds of stock, vary greatly in quality. South-Down rams have been considerably used with the common ewes of the country, for raising lambs for the butcher, and the cross has been generally very satisfactory. The prices vary from $10 to $25. They may be procured, we presume, of L. G. Morris, Fordham; J. McD. McIntyre, Albany, or J. M. Sherwood, Auburn, N. Y.

Raising Lopped Horns.—In answer to the inquiries of N. W. Moore, of West Turin, I would say that the horns of steers can be raised without the least damage to their growth—(the most convenient time to do it is when they are kept in the stable)—by taking two small pulleys; place one of them directly over the front edge of the manger, high enough to be out of the way of the horns—the other at any place you wish, the weight to hang out of the way; pass a cord through them with a loop at one end, to slip over a button on the end of the horn; at the other end attach a weight of from two to four pounds. This should be put on every night when the steers are put in the stable, and be taken off in the morning when turned out. I have never known that operation, when faithfully performed, to fail of raising one or both of the horns to any desired position, in from two to six weeks time. Our success has been such that we consider the lopping of one or even both of the horns, no serious objection, provided they are otherwise in good shape. L. C. Fuller. *Kent, Ct., August* 9, 1852.

Wire Worms.—I notice in the July number, a complaint by one of your correspondents about wire worms. I have been much annoyed by them, but in one instance have headed them off, and will relate the circumstance. In the spring of 1851 I planted about four acres to Indian corn, that had been under the plow for the two years previous; in about eight days after the planting, I found that this destructive insect was making sad havoc of the seed; not one kernel in five was coming up. It occurred to me that some preparation of the seed might prevent their attacks, and knowing that tobacco is particularly nauseous to the taste of most of the lower orders of creation, I made a strong decoction of this ingredient, using one pound of the plug to four gallons of hot water, and when at blood heat, turned it on to the seed, and let it remain 24 hours, taking the seed out no faster than four men could plant in the common way with hoes, which lasted the most part of a day.

My neighbors thought the soaking process in such a liquid, would destroy the germ of the kernel, but it did not prove so; it all, or nearly all, came up well, grew vigorously, and though it was the first of June when this second planting took place, I had a very fair crop. The worms neglected it entirely, and I am fully persuaded that they are not lovers of the "noxious weed" in any form. J. W. Colburn. *Springfield, Vt. August* 7.

NEW PUBLICATIONS.

History of the United States. By Richard Hildreth. Vol. VI. Harper & Brothers: New-York.

This volume completes the series, and is, we believe, the only work which covers the whole ground from the settlement of the country to so late a period. A carefully written and impartial history is a desideratum which every one who wishes a knowledge of his country, more complete and just than our political papers afford, must have felt. The author brings his narrative down to the year 1821, the close of Monroe's term of office, and as a consecutive, systematic, well digested, and well arranged history has no equal. Its style of execution is admirable, its table of contents full, and the dates are given with accuracy.

Lotus Eating, a Summer Book. By Geo. Wm. Curtis. Harper & Brothers.

The traveller upon the Nile and in Syria makes a tour to the Catskill Mountains and Falls, to Trenton, Niagara, Saratoga, Lake George, Newport, and Nahant, dreaming and writing as he goes, still waking now and then to a pleasing reverie or a life-like comparison. It is a lulling book for a weary hour, and some of its references to European scenery are beautiful. Its style is fanciful, yet there is good sound sense at the bottom.

The Mother at Home. By J. S. C. Abbott. Harper & Brothers.

The title is an epitome of the work. A Mother's duties, trials, responsibilities and joys are told faithfully and impartially. No writer understands better the secret springs of human affection, or arrays truth more pleasingly in its own native garb of loveliness, than Mr. Abbott. This book has been for some years before the public, and is now republished in a neat and attractive form.

The Child at Home. By John S. C. Abbott. Harper & Brothers

This little volume is an excellent companion to the Mother at Home. It should be in every christian family and read by every child. Its simple and impressive lessons, once made familiar, will rouse echoes in the heart, which can never die.

A Latin English and English Latin Dictionary. By Chas. Anthon, L. L. D. Harper & Brothers: New-York.

This is another result of Dr. Anthon's indefatigable labors. It is compiled from the best authorities, both English and German, and its arrangement is admirable.

It is designed for the use of schools and academies more particularly, though most of the words in common use will be found in it.

Dombey and Son By Chas. Dickens, in 2 vols. Harper & Brothers.

This well known and popular story has been brought out in a new dress, but Mr. Dombey wears his new clothes with as much dignity and propriety as he did the old. His old friends will not fail to recognise him, and show him such attention as will be gratifying to himself and those who procured this gala suit.

Pierre; or the Ambiguities. By Herman Melville. Harper & Brothers.

One of Melville's rich and entertaining stories. He possesses rare facility in the use of language, and a deep insight into the workings of the mind, when roused by passion, or laboring under extreme excitement. Melville is one of the few American writers, who have established a reputation abroad.

Harper's New Monthly Magazine. Harper & Brothers.

The August number commences a series of finely illustrated articles on the Holy Land, by John Abbott. Its monthly issue has reached one hundred thousand copies, and the periodical is conducted with increasing spirit and ability.

The New Englander. Published at New Haven, Ct.

This is a sterling work of the Puritan stamp. The August number contains several valuable articles, among which we notice one on Lord Bacon, and a finely written essay on the ethics of editorship.

Graham's Magazine. G. B Graham: Philadelphia.

The September number is before us, beautiful and interesting as ever.

Gypsum for Painting.—Inquiry.

Mr. Tucker—As many of my neighbors are making use of gypsum, or common plaster, mixed with linseed oil, for painting the roofs of buildings, it was suggested to me that Nova Scotia plaster, which is white, might be used to good advantage, as it could be colored to suit the fancy. I made known my purpose of trying some plaster and oil, to a friend who is more scientific than myself, and who says that "it will answer a poor purpose." Why? "Because plaster, having such an affinity for water, will readily leave the oil, and escape with it during the falling of heavy rains."

When plaster, or any other substance in the form of paint, is mixed with linseed oil, and spread out on a smooth surface, the oil *dries*, and becomes like a thin film, spread out and firmly adhering to the surface of whatever body it may be applied, holding the paint or plaster *mechanically*, securely in this thin skin. This covering is impermeable by water, or any other fluid which will not first destroy its solidity. Water, we all know, is a solvent of plaster—but while it is thus united with the oil in a solid state, and there being between oil and water, little affinity, is it at all probable that any of the plaster will leave the oil in its dry state, and pass off with the water? Who, that has had experience in this matter, will answer. Inquirer. *Lakeville, N. Y.*

[For the Cultivator.

Forest Musings.

How firmly stand the forest trees!
 Earth's giant sons are they;
Around their tops the fanning breeze
 And skimmering sunbeams play.

Thus firmly stand those of our race
 Who act the upright part;
The light of truth is on their face,
 Its home is in their heart.

How cool the shade the greenwood throws,
 How soft the shadows lie!
They ask the weary to repose,
 And every passer by.

Thus *Love* to all the sons of want
 Its mission would fulfill,
And if its portion be but scant
 It gives it with good will.

How musical the streamlet flows!
 And winds its way along;
The storm beats down, the tempests blow
 But nothing stops its song.

Thus he who has a cheerful heart,
 Though sorrow broods around,
Will bid the murky clouds depart
 And give a pleasant sound.

How beautiful the wood flowers wild
 O'er all the forest spread!
They smile as sweet as waking child
 Upon its cradle bed.

What glorious lessons do ye teach,
 Ye monarchs of the sod!
Like man ye have a voice to preach,
 Like man ye came from God. C. F. L. F.

Milwaukie, Wisconsin.

How to Pickle Tomatoes.

Eds. Cultivator—Tomatoes, although rejected by many of our country people, are susceptible of being prepared for the table in various ways. A nice way is by pickeling. I take one peck of tomatoes gathered green, and one quart of green peppers; soak them in cold water for 24 hours; after which I put them in a stone jar with cold sharp vinegar, enough to cover, together with one ounce of bruised cloves. Keep them in a cool place without freezing. Tomatoes pickled in this way will keep one year. Elizabeth Diehl. *Bristol, Ohio, July* 21, 1852.

We add to the above the following receipes, the first of which we have used with entire satisfaction for a number of years:

Tomato Pickles.—Take tomatoes two-thirds ripe, (when they begin to turn a little red,) prick them with a fork, put them in a strong brine, and let them remain eight days; then put them in weak vinegar to remain 24 hours; remove them from this, put them in stone jars; and to a peck of tomatoes add a bottle of mustard, an ounce of cloves, and an ounce of black pepper ground, laying alternately a layer of tomatoes and spices. Then pour on strong vinegar cold, and they will be found to be delicious. The brine should be prepared by boiling and putting in as much salt as will dissolve, then suffered to cool. For any kind of pickles it is best when prepared in this way.

Another.—Take the small round tomatoes, let them lay in weak vinegar two or three days; then prepare the best of vinegar by putting in cloves, allspice, pepper, cinnamon, and such spices as one may fancy, and then scalding it well. When entirely cold, put in the tomatoes, and if there is sufficient body to the vinegar, your pickles will never require any farther trouble, provided they are kept from the air. An ounce of alum to a gallon of vinegar is a great improvement to *cucumber* pickles, but the writer has never tried it for tomatoes.

Mr. Allen's Cattle Sale.

Mr. Allen's sale of improved stock took place in the vicinity of this city, on the 18th of last month, according to advertisement. The Catalogue embraced 122 lots, of which all but eight were present. The cattle were all in good condition, and as they were all arranged under the sheds for sale, presented an exhibition of which any farmer might be proud. The attendance was large, and the sales extensive, and at fair prices, fifty-five head having been sold for $4,280. But for the drouth, which has lessened the hay crop in a large portion of this and the New-England states fully one half, the whole lot would probably have sold at equally favorable prices.

Short-horn Cows, Heifers, and Heifer Calves.

1.	Lucy, 8 years old, Mr. Hurlbut, Ct.,	$100
2.	Lucy 2d, 2 years, Mr. ——— of S. Carolina	100
3.	Lucy, 3d, calf, Mr. Hurlbut, Ct.,	50
4.	Anna, 6 years, Gen. Cadwallader, Philadelphia,	105
6.	Portia 2d, calf, J. W. Watts, S. Carolina,	50
7.	Grace Darling, 9 years, Gen. Cadwallader,	105
9.	Milcha, 10 years, do	75
12.	Heloise, calf, J. M. Watts, S. Carolina,	50
13.	Roan Lady, 2 years, Dr. H. Wendell, Albany,	80
17.	Laura, 6 years, Gen. Cadwallader,	85
18.	Rosette 2d, calf, do	45
19.	Myra, do do	40
20.	Clara Fisher, 4 years, Col. Sherwood, Auburn,. (This cow was afterwards purchased by Gen. Cadwallader of Col. S. for $325.)	290
21.	Skylark, 6 years, Mr. Geo. Vail, Troy,	100
23.	Yarico 2d, calf, Gen. Cadwallader,	50
25.	Blanche Rose 2d, 4 years, Mr. Vail,	80
27.	Blanche Rose 3d, 2 years, John C. Jackson, N. Y.,	100
32.	Carnation 1st, 7 years, Gen Cadwallader,	60
33.	do 2d, 6 years, do	100
34.	do 3d, 6 years, do	75
35.	do 4th, 5 years, do	200
38.	do 11th, calf, do	40
42.	Rosabelle 1st, 2 years, M. D. Burnet, Syracuse,	120
43.	do 2d, 2 years, Capt. Lowry, Hyde Park,	130
45.	do 4th, 2 years, M. D. Burnett, Syracuse,	80
47.	do 6th, calf, J. W. Watts, S. Carolina,	50
48.	Pattie, 4 years, Geo. Hartshorn, Rahway, N. J.,	80
49.	Mariette, 5 years, Francis Morris, Westchester, N. Y.,	105
121.	Betsey, 6 years, not in Catalogue, Mr. Becar, L. I.,	230
122.	Betsey 2d, 4 weeks old, do do	100

Short-horn Bulls and Bull Calves.

56.	Lauderdale, 1 year, George Vail, Troy,	90
57.	Shaftsbury, 7 months, Capt. Lowry, Hyde Park, N. Y.,	100
60.	Bollingbroke, 1 year, Mr. Lansing, Buskirk's Bridge..	60
62.	Burleigh, 10 months, ——— S. Carolina,	75
64.	Redmond, 7 months, Mr. Fonda, Hoosick	55

Grade Cows, Heifers, and Heifer Calves.

71.	Red Rose, 4 years old, Mr. Hurlbut, Ct.,	75
72.	Moss Rose, 4 years, Mr. Merriman, Oneida co.,	85
73.	Strawberry, 5 years, Francis Morris, Westchester,	80
74.	Jane, 4 years, Mr. Hurlbut, Ct.,	80
76, 85, 87, 89, 91, 93.	calves, C. Dubois, Poughkeepsie,	150
78.	Miss Curtiss, 4 years, Geo. Hartshorn, Rahway, N. J.,	50
82.	Peony, 5 years, Mr. Braystill, Staten Island,	75
84.	Pet Red, 4 years, Mr. Walbridge, Bennington, Vt,	50
86.	Silver Tail, 4 years, Mr. Becar, Brooklyn, L. I.,	75
94.	Betsey, 2 years, Geo. Hartshorn,	50
104.	Grade Bull Calf, ———	30

Herefords.

108.	Rarity, 15 years, E. Corning, Jr., Albany,	75
111.	do 4th, calf, Mr. Brown, Albany,	30
112.	do 5th, calf, do do	30
119.	1 pair 3 year old Red Devon and Short-horn steers, Gen. Cadwaller,.	90
		$1,280

◆

Hybrids between the Common and Musk (or Muscovy) Ducks.—It appears not to be generally known that hybrids between these birds are incapable of procreation. Such is the fact. The hybrids attain a good size at an early age, and are much esteemed for the table. An English writer says he has found from various trials, that the progeny of the musk drake and the common duck, are much better than from the common drake and musk duck; in the latter cross, the males, he says, are much smaller than by the former, and more disposed to fly about.

Exhibitions and Cattle Shows for 1852.

NATIONAL.

American Institute, New-York.—Exhibition opens at Castle Garden, Oct. 5. Cattle Show, Oct. 19, 20, 21.

American Pomological Congress.—Commences its session at Philadelphia, Sept. 13.

STATE.

New-York—At Utica,	September 7, 8, 9, 10
Ohio—At Cleveland,	Sept. 15, 16, 17
Michigan—At Detroit,	Sept. 22, 23, 24
Indiana—At Indianapolis,	Oct. 19
Pennsylvania—At Lancaster,	Oct. 20, 21, 22
Georgia—At Macon,	Oct. 19 to 23
Maryland—At Baltimore,	Oct. 26, 27, 28, 29
Wisconsin—At Milwaukie,	Oct. 6, 7, 8
Vermont—At Rutland,	Sept. 1, 2, 3
Rhode Island—At Providence,	Sept. 15, 16, 17
New Hampshire—At Merideth Bridge,	Oct. 6, 7, 8

PROVINCIAL.

Canada West—At Toronto,	Sept. 21, 22, 23, 24
New-Brunswick—At Frederickton,	Oct. 5 to 9

COUNTY SHOWS—NEW-YORK.

Cayuga—Auburn,	Oct. 6, 7
Clinton—Keeseville,	Sept. 22, 23
Cortland—Cortland Village,	Sept. 15, 16
Dutchess—Washington Hollow,	Oct. 5, 6
Genesee—Bergen,	Oct. 6, 7
Greene—Cairo,	Sept. 21, 22
Herkimer—Herkimer,	Sept. 28, 29
Jefferson—Watertown,	Sept. 16, 17
Madison—Eaton,	Sept. 22, 23
Lewis— ——	Sept. 14, 15
Orange—Middletown,	Sept. 29, 30
Oswego—Fulton,	Sept. 29, 30
Otsego—Morris,	Sept. 22, 23
Putnam—Carmel,	Oct. 5, 6
Queens—Flushing,	Sept. 29
St. Lawrence—Canton,	Sept. 15, 16
Washington—Union Village,	Sept. 29, 30
Wayne—This county holds two fains—one at Wolcot,	Sept. 21, 22
The other at Palmyra,	Sept 28, 29
Saratoga—Mechanicsville,	Sept. 15, 16, 17
Rensselaer—Troy,	Sept. 22, 23, 24
Essex— ———	Sept. 20, 21 22
Suffolk—Huntington,	Sept. 22
Seneca—Waterloo,	Sept. 30 and Oct. 1
Monroe—Rochester,	Sept. 29, 30
Ontario—Canandaigua,	Sept. 29, 30

TOWN SOCIETIES.

East Bloomfield,	Oct. 5, 6
Cape Vincent,	Sept. 15

MASSACHUSETTS.

Hampshire, Franklin and Hampden—Northampton,	Oct. 6, 7
Franklin—Greenfield,	Sept. 29, 30
Hampden—Springfield,	Sept. 29, 30
Hampshire—Amherst,	Oct 27
Worcester—Worcester,	Sept. 23.
Berkshire—Pittsfield,	Oct. 6, 7
Essex—Lawrence,	Sept. 29, 30

CONNECTICUT.

Franklin—Greenfield,	Sept. 29, 30
Middlesex—Concord,	Oct. 6
Middlesex—Middletown,	Oct. 6, 7, 8

VERMONT.

Addison—Middlebury,	Oct. 6
Bennington—North Bennington,	Sept. 22, 23
Franklin—St. Albans	Sept. 8, 9
Windham—Fayettville,	Sept. 15, 16

NEW-JERSEY.

Burlington—Mount Holly,	Oct. 6

PENNSYLVANIA.

Berks—Reading,	Oct. 1
Bucks—Newtown,	Sept. 29
Montgomery—Norristown,	
Philadelphia—Near Philadelphia,	Sept. 30, and Oct. 1
Susquehanna—Montrose,	Oct. 6
Northumberland—Northumberland,	Oct. 7, 8

OHIO.

Cuyahoga—Cleveland,	Oct. 6, 7

MICHIGAN.

Lenawee—Adrian,	Oct. 6, 7

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Sale of American Reaping Machines.—The London Times, in a report of the meeting of the Royal Agricultural Society of England, states that 1,500 of Hussey's and McCormick's machines have been made to order this season. A sale of a new implement quite unprecedented. It also states that the demand for Hussey's machine, as improved by the English manufacturer, is much the greater. It cuts closer to the ground and does its work better.

NOTES FOR THE MONTH.

New-York State Fair.—This great annual exhibition, which has become in some degree a national anniversary, is to come off at Utica, on the 7th, 8th, 9th, and 10th of this month. It will be remembered that the Premium List for this year, has been greatly enlarged over that of any previous year; and we have reason to believe that the exhibition will exceed in interest any one that has preceded it. Among the most attractive things on exhibition will be the Reaping and Mowing Machines recently tried at Geneva. The address will be delivered by Hon. Horatio Seymour of Utica.

United States Ag. Society.—We have received the first number of the new Journal of this Society. It is a handsome octavo of 144 pages, and is to be issued quarterly. In appearance it is all that need be desired; but its contents have disappointed us. We had supposed that it would be the aim of the Society to furnish a Journal, which, in some degree, should compare with the Journals of the Royal Ag. Society of England, and the Highland and Ag. Society of Scotland—that is, that its Journal should consist of the Transactions of the Society, and of such original papers of a high order as it should be instrumental in producing. But instead of this, a large portion of the present number is made up of extracts—valuable certainly,—but which are already accessible to the public, who look for, and have a right to expect, something more from a National Society than the reiteration of what has already been said and done. Such an organization should be the great fountain head of Agricultural research and information, and as such, send forth streams to water and fertilize our land.

Coons' Patent Iron Fence.—We have received proof sheets of a treatise on fence building, by Mr. M. P. Coon's of Troy, N. Y., who has patented a method of combining iron and wood in the construction of a fence, which secures both permanence and cheapness in the structure. The book treats of the several kinds of fence in use, showing the objections to each, and lays down a principle, which is said to be well sustained by facts, in the short time in which it has been tested. The author thus states his main principle—"By practical tests, as well as observation, it will be discovered that the raising of the ground by frost, does not affect the position of a stone, or log of wood, when horizontally imbedded in the earth." The reasons for the truth of this are stated at considerable length, and seem satisfactory. In accordance with this theory, a block of stone is laid into the ground at sufficient depth, in a horizontal position, and the upright iron post is firmly fixed in it. The post is now immoveable, and it only remains to properly join to it the bars and pickets. The method of coupling the bars, which may be either of iron or wood, to the post, is peculiar, and of such a nature that the fence can be erected equally well in all situations. It admits of a pleasing variety of form, and must necessarily be more durable than the common kinds of fence in use. Judging from the reasoning in the treatise, and a specimen we have seen near this city, we are confident that Mr. Coons has succeded in making a valuable improvement in this important branch of rural economy.

We hope at some future time to present our readers with a cut of the *farm* fence, and a farther description of the mode of its construction.

Mr. Downing's Successor at Washington.—Mr. Breckenridge, of Washington, a gentleman who is fully acquainted with Mr. Downing's plans, and has been associated with him in the carrying out of his designs, has been appointed by the President to complete the improvements now being made at the Capital. Though this appointment disappoints many aspirants, it will undoubtedly secure the faithful development of the proposed plan, and so give satisfaction.

Mass. Board of Agriculture.—This Board was incorporated by the last legislature. It consists, we believe, of five members appointed by the Governor and Council, and a Delegate from each County Ag. Society in the State. The Board are authorised to appoint a Secretary, who shall devote his time under their direction, to the advancement of the interests of agriculture. At a recent meeting of the Board, the Rev. Dr. Hitchcock of Amherst College, received the appointment of Secretary. We shall rejoice to hear that he has accepted it, for we know of no one in the country from whose labors so much benefit might be anticipated.

Trial of Reaping and Mowing Machines.—Manny's Northern Illinois Reaper and Mower, and Burrall's Machine, were tested in the neighborhood of this city on the 5th August. A large number of farmers were present at the trial, and general satisfaction was expressed at the performance of both machines. They did their work well, and with a rapidity truly surprising. By the use of Reaping and Mowing Machines, the farmer will be able to secure his crops of hay and grain at the proper time, thus avoiding the waste incident to delay, in cutting altogether by hand. The expense, too, must be materially lessened by their use. Some very interesting statements, respecting the trial of Agricultural Implements at Geneva, will be found in our columns.

Buffalo Nursery.—Our old friend Col. Hodge, who originally started this nursery,—the first, it is said, west of Albany,—having accomplished that most desirable desideratum, an "ample fortune," has sold out his nursery, and retired to his fine farm at Peach Haven on Grand Island, near Niagara Falls, where he has been engaged for some years in planting large orchards, of the different varieties of fruit trees. May he live long to eat the fruit thereof. His successors in business are D. S. Manley & Brothers, who have just issued their first Catalogue, and who are strongly recommended to the public by Col. Hodge.

The Potato.—Our correspondent "C. E. G.," whose paper will be found on another page of this number, sent us the following, to be added as a "P. S." to his article; but as it came too late to be attached to the article, we give it a place here:

P. S.—Should the alternations of frequent light rains, with either warm, damp, and cloudy weather, or still sunshine, which have existed since the 3d, continue, I greatly fear they will produce mildew and disease. The late abundant rains, followed, for a few days, by cool windy weather, promise to leave the cuticle of the foliage firm, and the elaborations healthful. But the present state of the weather severely threatens the health of the crop. Its foliage has expanded with great rapidity, for the last few days, and, in many fields, lies very thick. The circulation will be liable to become plethoric, the cuticle tender, and mildew and bad elaborations to follow. The natural result of this must be disease of the tubers. C. E. G. *Utica, Aug.* 10.

Crops in Virginia.—We give the following extract of a letter from M. Davis, Jr., Esq., dated Lynchburg, August 2. "We have had another dry season, which is the third in succession. In some neighborhoods the oats and clover have nearly failed. The wheat, in the fields, generally appeared tolerably well; but much of it has the disease called 'smut,' and on some farms to an extent that the millers refuse to receive it. The so called 'blue stem', is most diseased. The corn and tobacco crops, though much affected by the drouth, appear much more promising than might be expected."

Correction.—Your correspondent, (August No., p. 287,) used a piece of poke weed the size of a common ear of corn. Not a kernel, as the printer has it—a small dose, unless administered by a homœpathist. M. *Morris, August* 16, 1852.

☞ We are indebted to the Hon. Wm. H. Seward for copies of a proposed bill, incorporating a department of Agriculture in connection with the general government, and another proposing to establish a United States Agricultural Academy, both drafted by Worthington G. Snethen, Esq., of Washington, D. C. The first bill creates four distinct Bureaus, severally officered, and under the superintendence of a Secretary of Agriculture, viz: A Bureau of the Science and Practice of Agriculture; one of Agricultural Chemistry; one of Agricultural Mechanics, Manufactures, and Commerce, and one of Agricultural Statistics. The ostensible purpose of these Bureaus is the collection of facts and statistics, and reducing them into a shape, accessible to the mass of the people. The details of the plan are drawn out with great precision, and yet the scheme is so complicated that we have great doubts whether it could be successfully carried into effect. The plan of the Agricultural Academy is similar to the one proposed to the N. Y. State Legislature, though on a much larger scale. It provides for a model farm to be carried on by students, for thorough scientific and practical instruction, and the *et cetera* of such institutions. The students to be appointed by members of Congress, and supported during a four years' course, by the public treasury.

Health vs. Wens.—We have received a communication from N. Randall, of Woodstock, making some severe strictures upon the article of S. E Todd, published in the Cultivator for August, from which we make the following extracts:—"Does friend Todd suppose that such a foul corroding ulcer, as he describes, is produced without a legitimate, inherent cause? Does he think an animal can be in good health and be afflicted with such a loathsome sore? And if sick, ought the animal to be used for food? I had supposed it was well understood that such incurable sores upon man or beast were the result of *disease* in the system, and the outlets for the discharge of *poisonous* matter, which would destroy life immediately were it not for such discharge."

New Reaping and Raking Machine.—Mr. Chas. Denton of Peoria, Ill., has invented a machine which cuts the grain and lays it in bundles ready to bind. The bundles are laid at the side of the machine, out of the way of the team; thus any amount can be cut, independent of the binding.

Leicester Sheep.—A writer of a letter from Jefferson county in this state, published in a Kingston paper, says that Col. S. D. Hungerford of Adams, has a very superior flock of Leicester sheep—among them a ram which weighed over 300 lbs. after shearing.

Ayrshire Cattle.—The same writer also mentions a pair of Ayrshires, which were imported from Ayrshire last autumn, by Mr. James Brodie of Ellisburgh, which he thinks very fine specimens of this breed. We presume these animals, as well as samples of Mr. Hungerford's sheep, will be at the State Fair

Comparative Moisture of Fallow Ground, and that which Supports Crops.—Some people urge as an excuse for not destroying weeds among their crops, in a dry time, that they are necessary to shade the ground, and keep it from drying. But they might have seen, that fallow ground preserves its moisture during drouth, better than any other. Plants actually pump up the moisture from the soil, and it is carried off through their leaves by evaporation. According to Liebig, "water evaporates incessantly from the surface of the young plant; its quantity is in direct proportion to the temperature and extent of the surface." This explains why sward ground, and ground near trees, become dry to so great a depth during seasons of drouth.

Notice---Superphosphate of Lime.

AS there is a spurious substance now offered for Superphosphate of Lime, Farmers and Gardeners would do well to know and examine the article before purchasing.

We have for sale the article branded on the bag, C. Deburg. No. 1. and also that made under the direction of Prof. Mapes, the qualities of which have been tested. LONGETT & GRIFFING.

Sept. 1—1t. No. 25 Cliff street, New-York.

Merino Sheep for Sale.

THE subscriber offers for sale, 50 Merino Ewes, 2, 3 and 4 years old, a cross from a Merino Buck of the Taintor importation, and Spanish Merino Ewes..

Also a few Bucks from the same cross. Also a few Bucks, a cross from an Atwood Buck and Spanish Ewes. Terms made reasonable, to suit purchasers. A. H. AVERY.

Galway, Saratoga Co., N. Y., Sept. 1, 1852—1t.*

POUDRETTE,

FOR Grass Lands, Lawns, and Winter Grain, also for shrubs—for sale by the Lodi Manufacturing Company, in lots to suit purchasers. Price $1.50 per barrel, for any quantity over six barrels. For *Shrubs*, $2 per barrel.

☞ The Company will sell lots of 100 barrels or over, at a reduced rate this fall, as they are making extensive alterations in their buildings, which will compel them to empty their vats. For particulars address "The Lodi Manufacturing Companny," 74 Cortlandt Street, New-York. Sept. 1—2t.

Colman's European Agriculture.

EUROPEAN AGRICULTURE, from personal observation, by Henry Colman, of Massachusetts. Two large octavo vols. Price, when neatly bound, the same as published in Nos., $5. For sale at the office of THE CULTIVATOR.

Fruit and Ornamental Trees.

ELLWANGER & BARRY desire to call the attention of Nurserymen, Dealers and Planters, to the immense stock of tree- now on their grounds, embracing Fruit trees of every description.

Standard Apples, Pears, Plums, Cherries, Peaches, &c., on fine stocks for orchards—vigorous and well formed.

Dwarf and Pyramidal Pear Trees, on Quince stocks, about 100,000, embracing every fine variety that can be so worked; two year old trees, low branched, vigorous, and beautiful.

Dwarf and Pyramidal Cherries, on Mahaleb stocks—fine—one, two, and three year old trees—well branched and finely formed.

Dwarf Apple Trees, on paradise and Doucain stocks—beautiful; 2 year old trees with heads, for immediate bearing, besides vigorous yearlings.

Gooseberries, large Lancashire sorts, strong plants for immediate bearing.

Currants, including the *Cherry*, *Victoria*, *White Grape*, and many other new and fine sorts. See our Catalogue.

Raspberries—the new *Large Fruited Monthly*, Fastolff, &c., &c., a complete collection of all desirable varieties.

Grapes—all good hardy native sorts—strong 2 and 3 year old vines. and 30 varieties of Foreign Grapes for vineries—strong thrifty plants in pots.

Strawberries of all desirable varieties, and all other fruits cultivated.

The entire fruit department is under our own personal supervision; the best quality of stock is used, and the most scrupulous attention given to ensure accuracy; we flatter ourselves that no nursery collection can offer a stronger guarantee to purchasers in this respect. The stock is all grown on new fresh soil, and is healthy, well matured, and hardy; we ask the purchasers to examine it.

Ornamental.—Large trees for streets, parks, &c., such as *Horse Chestnuts*, *Silver Maples*, *Sugar Maples*, *Snowy Abeles*, *Mountain Ash*, *Elms*, and *Tulip Trees*, in large quantities—cheap.

Rare Ornamental Lawn Trees, embracing the most novel, remarkable, and beautiful Trees and Shrubs, both deciduous and evergreen, that can be grown in our climate; for particulars we must refer to the Descriptive Catalogue.

Roses—one of the richest collections in the country, including the newest and best European varieties, selected by us last summer, in person.

Bulbous Roots—imported annually from Holland.

Dahlias—the new English and French prize sorts of 1851, besides fine older ones. All articles packed in the best manner, and forwarded to any part of the United States, Canada, or Calafornia. Orders strictly complied with in every particular. The following Catalogues are now sent gratis, to all who apply and enclose stamps to cover postage, which must be prepaid.

No. 1. Descriptive Catalogue of Fruits.

No. 2. do do of Ornamental Trees, Shrubs, &c.

No. 3. A Catalogue of Dahlias, Fuchsias, Chrysanthemums and bedding plants.

No. 4. A wholesale Catalogue for Nurserymen and others, who wish to purchase largely.

Postage on Nos. 1 and 2—500 miles or under, 3 cents; 500 to 1,500 miles, 6 cents.

Postage on Nos. 3 and 4—500 miles or under, 1 cent; 500 to 1,500 miles, 2 cents.

Mount Hope Nurseries, Rochester N. Y., Sept. 1, 1852—1t.

Fruit and Ornamental Trees.

River Bank Nursery, Rochester, N. Y.

SHEPPARD & CHERRY, Proprietors,

NOW offer to furnish Nursery stock generally. of as good quality and at as low rates, as can be obtained elsewhere.

FRUITS.—All the leading varieties, both standard and dwarf, of Apple, Cherry, Peach, Pear, Plum, &c., &c. Gooseberries, Currants, Raspberries, Strawberries, &c. Grapes—Isabella, Catawba, Clinton, &c., &c.

Also 100,000 Apple Stocks.
20,000 Cherry do root pruned.

All orders accompanied with the cash or satisfactory reference, and all letters of inquiry post-paid, will receive prompt attention.

From the connection of Mr. Sheppard for a number of years, with the following establishments, all of which sustain the highest reputation, viz: A. J. Downing & A. Saul, Newburgh, N. Y.; Wm. Reid. Elizabethtown, N. J , and Ellwanger & Barry, Rochester, N. Y., the proprietors flatter themselves that their knowledge of the great variety of tastes and wants of planters generally, will enable them to guarantee ample satisfaction to all favoring them with their patronage.

Rochester, Sept. 1, 1852—2t.

Choice Garden and Flower Seeds.

COMSTOCK, FERRE & CO.,

SEED GROWERS,

Wethersfield Seed Gardens, Wethersfield, Ct.

Established over 30 years.

THE great popularity of the Seeds grown at this establishment, has been gained by the assiduous personal care and attention of the proprietors. Their quality and productiveness will continue to be unsurpassed. Dealers, Market Gardeners and others, supplied in bulk, or neatly papered, at low prices for the quality of the seeds.

30 papers Choice Flower Seeds sent by mail, POSTAGE PAID, *for one dollar.*

The Gardener's Almanac and Descriptive Catalogue, containing 60 pages, sent by mail on the receipt of a three cent stamp. Abridged and Price Catalogues, gratis. Seeds forwarded from Hartford.

Sept. 1, 1852—1t.*

Horse Powers, Threshers and Separators.

Endless Chain Powers

OF all kinds ever made, for one and two horses, also cast iron Sweep Powers, for one to four horses. Threshers and Separators to match the above. JOHN MAYHER & CO.,

United States Agricultural Warehouse and Seed Store,
Sept. 1—tf. No. 197 Water Street, New-York.

Premium Strawberries, Bulbs, Pæonies, &c.

WM. R. PRINCE & CO., Linnæan Gardens and Nurseries, Flushing, offer the following strawberries. which have been selected from all the varieties at present known, the others having been rejected, and all these are described in their supplement catalogue of 1852.

Le Baron, large, productive, and *highest flavored of all*, $2 per dozen.

Monstrous Swainstone, very large, delicious flavor, $1 per dozen

Maximus Swainstone, very large, high flavor, $1 per dozen.

Charlotte, large, delicious sprightly flavor, productive, 50 cents per dozen.

Superlative, spicy, rich flavor, a productive seedling of Burr's new Pine, $1,50 per dozen.

Coronation, very large, very productive, bright scarlet, $1 per dozen.

Magnifique, very large, orange scarlet, productive, $2 per dozen.

Triumph, scarlet, very productive. seedling of large early scarlet, double in size and thrice as prolific, $2 per dozen.

Primate, large, deep scarlet, productive, $1 per dozen.

Champion, very large, scarlet, oblong cone, $2 per dozen.

Twice-bearing Swainstone, a second crop in September, very productive, $1 per dozen..

Sylphide, very large, light scarlet, beautiful, excellent, $1 per doz.

N. B.—We guarantee the above 12 varieties to be superior to any other dozen that can be produced, and the first four are superior in flavor to Burr's New Pine.

The following, $1 per dozen, except were priced otherwise.

Crimson Pine, conical, sweet, rich, very productive.

Cluster Hudson, conical, scarlet, very productive.

Cornucopia, large. good flavor, productive, 50 cts. per dozen.

Profuse Scarlet, like early scarlet, but produces double, 50 cts. per dozen.

Primordean, beautiful scarlet, productive, not high flavor, 37 cents per dozen.

Tivoli Scarlet, very large, beautiful, estimable, very productive.

Unique Scarlet, light scarlet, rich flavor, moderate bearer, 37 cents per dozen.

Lodoiska, scarlet, excellent flavor, productive.

Spiral, elongated cone, usually produces second crop in September

Victorine, large, fine flavor, very productive.

Dido, very large, rich flavor, productive.

Iphigenia, large, fine flavor, productive.

Sylvestris, scarlet conical, very productive.

Campagnia, large, crimson, pointed cone.

Mytelene, crimson, roundish, rich flavor.

Psyche, large, beautiful, excellent—very prolific.

Amanda, light scarlect, juicy, productive.

Warrington, large crimson, conical.

Fredonia, large, pointed cone, productive.

Triumphant Montevideo, ovate, monstrous, deep scarlet; $3 per dozen.

NOTE. *The preceding 32 splendid varieties were originated by ourselves, and most of them are nowhere else to be obtained.*

McAvoy's Superior, Schneicke's Pistillate, Longworth's Prolific, Moyamensing, Walker's Seedling, Huntsman's Pistillate, Bicton White, Myatt's Prolific, Surprise and Hautbois; River's Eliza, Calafornian Pine, Mexican Alpine, La Delicieuse, La Liegoise and Brittania—all at $1 per dozen.

Merveille, largest French variety, $2 per pair.

Montevideo Pine, very large, beautiful, $2 per dozen.

Goliath, very large, $3 per dozen ; Crescent Seedling, $3 per pair.

The following at 37 to 50 cents per dozen, and $2 per hundred. Myatt's Eleanor, Mammoth, Globe, British Queen, and Prolific Hautbois; Lizzie Randolph, Black Prince, Jenny's Seedling, Iowa, Schiller; Burr's New Pine, Rival Hudson, Scarlet Melting, Columbus and Scioto; Ellwanger & Barry's No. 1, Monroe, Genesee, Climax, and Orange Prolific ; *True* Bishop's Orange, Black Rock, Abyssinian Prince, Eberlein, Green and Flat Hautbois, Red and White Bush Alpine, and Elton Pine.

The following at 25 cents per dozen, and $1 per hundred : Large Early Scarlet, or Early Virginia, Crimson Cone. Hovey's Seedling, Boston Pine, Hudson, Willey. Methven Scarlet, Necked Pine, English White and Red Wood, White and Red Alpine, and Dundee.

Herbaceous Pæonies of above 100 splendid Chinese Double varieties, and *Tree Pæonies* of 40 varieties. Tulips, Hyacinths, and Japan Lilies, and all other Bulbous Flower Roots, including the White and Yellow Calochortus of California. Victoria, Colossal, and other kinds of Rhubarb, Sea Kale, and Asparagus, which can now be transplanted.

The finest European table grapes in pots, $5 per dozen.

The following Strawberries have been rejected: Richardson's Early, Late, and Cambridge; Burr's Seedling, Mammoth. Profusion and Late Prolific; Deptford Pine, Royal Pine, Myatt's Eliza, Lord Spencer, Old Pine. Cushing, Princess Alice Maud, Swainstone, Keene's Seedling, Duke of Kent, French Cucumber, Buists Prize, Downton, Knevett's Pine, Royal Scarlet, Princess Royal and Prince of Orleans, and above 40 others, as stated in our Cotalogue. All will be well packed, and forwarded as directed.

Descriptive Catalogues of all Trees and Plants, with prices, will be forwarded to post-paid applicants who enclose postage stamps.

Sept. 1—1t.

Strawberry Plants.

B. M. WATSON, Old Colony Nurseries. Plymouth, Mass., offers for sale the following strawberries. Plants carefully packed—carriage paid to Boston.

Cresecnt Seedling Perpetual.—This is a new American Seedling raised by Mr. Lawrence of New Orleans, by crossing British Queen and Keen's Seedling. It is the first perpetual strawberry of large size and first rate quality ever raised. For six months this remarkable fruit continues in bearing. "I neither cut off the blossoms," says Mr. L., "nor any part of them, to increase its bearing—it is one continued crop from the first jump; and if you want to know how it bears after four months fruiting, a friend has just (May 9) counted from 33 to 42 berries on four successive plants, the largest measuring 5½ inches, and the average being three inches in circumference." No doubt this variety will greatly extend the strawberry season at the north, making it an immense acquisition to strawberry growers, and in hybridizing. The almost utter impossibility of getting plants alive from New Orleans, will make this kind scarce for some time. It has been ordered from all quarters, but very few plants have been received alive. Dr. Bayne, the famous strawberry grower at Alexander, D. C., ordered $25 worth, but succeeded in "saving but one plant, which," he remarks, "$25 would not buy." I myself was *still more unfortunate to the same tune.* Mr. Pardee, of Palmyra, N. Y., after repeated efforts,succeeded in saving a few plants. His entire stock is in my hands, and plants will be ready in October, in pots, $2 each.

McAvoy's Superior, a large and productive variety which obtained the premium of $100, offered by the Cincinnati Hort. Society for a new variety superior to any in cultivation.

Moyamensing, a fine fruit of rich aroma and high flavor, very firm and highly productive. A special premium was awarded it by the Pennsylvania Hort. Society.

Walker's Seedling, a dark colored berry, of good size; a very abundant bearer, of high flavor and very high quality. Raised by Mr. Walker, President of the Mass. Hort. Soc., and highly recommended by the fruit committee. Plants now ready, $1 per dozen..

New Foreign Strawberries, recently imported; now first offered.

Fertillized Hautbois, (Myatt.)—Very prolific and of large size. Highly recommended to all who admire the peculiar and high flavor of its class. Fruit conical, deep purple in the sun, and of that sweet and delicious flavor for which the Hautbois are noted.

Surprise, (Myatt.)—A new seedling of Mr. Myatt, the great strawberry grower of England, of fine quality, very large and handsome.

Quinquefolia, (Myatt.)—This fine seedling of Mr. Myatt, promises to compete favorably with any of the famous fruits he has raised. Flavor peculiar and delicious. The leaf has the peculiarity of being divided into *five* leaflets.

Prolific, (Myatt.)—A medium sized crimson scarlet, conical, of rich flavor, and a prodigious bearer.

Eliza Seedling, (River's,) a fine seedling from Myatt's Eliza; one of the best early strawberries known. Its flavor is exquisite, habit compact; a prodigious bearer.

La Liegoise, (Haguin,) of French origin. Fruit medium sized, brilliant scarlet, flavor excellent; very early and prolific; a very promising fruit.

Brittania, (Jackson,) a capital fruit of large size. Its great bearing qualities will make it a favorite.

Bicton Pine.—A superb white strawberry of large size and showy appearance. Its color makes it a great acquisition.

Stirling Castle Pine.—An excellent variety with the true pine flavor, of great reputation in England.

Cremont, (Cremont,) very early, large and of excellent quality.

Athlete. (Salter,) of prodigious size, probably the largest ever grown.

La Delicieuse.—A new French variety, which I have not fruited. Highly recommended in the French journals.

Excellente, (Lorio.)—A very superior fruit, well worthy its name. Fruit very large, flattened, extremely firm, very juicy with the flavor of the wild strawberry. This will prove a great favorite.

Plants in pots, $5 per dozen sorts, in September.

Other Rare Foreign Sorts.

Plants now ready, $3 per dozen.

Princesse Royale, (Pelilain.)—A new French variety of great reputation, of large size and an abundant bearer.

Knevett's Pine.—A superb fruit, of great reputation abroad.

Downton.—A seedling of Mr. Knight. Fruit of medium size and very high flavor.

Royal Pine.—A first rate fruit of the largest size and excellent flavor, and considered one of the best sorts in England.

Elton Pine.—The best late sort in England, very large, bright red, flavor delicious.

Goliath, (Kitley.)—A seedling from British Queen, and larger than that variety.

Compte de Paris, (Pelilain.)—A very beautiful berry, large, and an excellent bearer.

Victoria, (Trollop)—A famous sort, of great reputation abroad.

Prince of Orleans.—An abundant bearer.

French Cucumber.—A very long and curious fruit. It belongs to the Hautbois.

Montevideo Pine—Conical Scarlet, very handsome.

Fine varieties at $2 per hundred—50 cents per dozen.

Myatt's British Queen, Deptford Pine, Eleanor, Eliza, (late,) Globe, Prolific Hautbois.

Burr's New Pine, Columbus, Mammoth, Rival Hudson, Scioto.

Richardson's Early. Late, Cambridge, (fine.)

Ellwanger & Barry's Monroe, Climax, Prol. Orange, Genesee.

Prince's Scarlet Unique, Lizzie Randolph, Primordian, Profuse Scarlet, Cornucopia, Charlotte.

Lord Spencer, (high flavor,) Black Prince, Old Pine, Cushing, Schiller, Princess Alice Maud, Keene's Seedling, Swainstone, Jenny's Seedling, Iowa.

Older sorts—$1 per 100.

Early Virginia, Methven Scarlet, Boston Pine, (very fine,) Hovey's Seedling, Large Early Scarlet, Crimson Cone, Duke of Kent, (early,) Dundee, Willey's Seedling, (great bearer,) Hudson.

New Hardy Shrub.—Deutzia gracilis.—This charming shrub, which created so much sensation at the great exhibition of plants at Ghent this spring, is now offered, in pots, $1 each.

New Heliotropes.—Immortalite de Maria Louise is a new variety raised at Liege. "The cymes are large, each blossom being green at the center, *emblematical of hope*. surrounded by a crown of gold, *emblematical of holiness;* the five rays of the border represent the virginal whiteness of the celestial stars. It has this peculiarity, that the flowers have the delicious fragrance of the violet and wall flower." Now first offered. $1 each. Heliotropes, gem, corymbosum, lilacina, reptans, grisam. 75 cents each; intermedia, voltairianum, Souvenir de Liege, grandiflora, 25 cents each. The sett for $5.

Fuchsia spectabilis $1. The finest collection in the country of recently imported Fuchsias, Verbenas, Petunias, new dwarf Chrysanthemums, Daisies, Phloxes, Scarlet Geraniums and Roses, in immense variety and of novel colors and habits.

Foreign grapes in pots, $5 per dozen, $40 per 100. Paradise, Mahaleb, Plum and other stocks for Nurseries.

A full assortment of fruit and ornamental trees and shrubs. A general priced and descriptive catalogue, sent gratis on receipt of one postage stamp for over 500 miles of distance. Sept. 1—1t.

FRUIT TREES, SEEDLINGS, &c.

T. C. Maxwell & Co., Geneva, N. Y.

ENCOURAGED by the generous patronage heretofore received, and by a soil, climate, and position peculiarly favorable to the growth of *healthy* trees, we have so enlarged our stock of nursery articles, that we are now enabled to offer great inducements to all who may wish to purchase, either at wholesale or retail. We have between *five and eight hundred thousand* trees, in the different stages of growth, which have been propagated with the strictest care as to merit and genuineness of varieties.

Orders by mail, or otherwise, promptly attended to, and trees securely packed and delivered at the Railroad Depot or Steamboat.

Of large trees, we offer this fall the following, viz:

60,000 *Apple Trees*, best varieties for market or family orchards.
30,000 *Cherry* do very thrifty and handsome.
6.000 *Pear* do standards—healthy and large.
20,000 do do dwarfs, on True Angers quince—one and two years old.
10,000 *Peach* do very nice.
4,000 *Plum* do 5 to 7 feet high—best sorts.
2,000 *Apricot* do mostly Dubois' Early Golden.
2,000 *Grape Vines*, mostly Isabella.
10,000 *Evergreens*, Balsam Fir, Cedars, Norway Spruce, &c.
5,000 *Mountain Ash*, large and fine—*very cheap.*
3,000 *Horse Chestnut*, large and handsome.
40,000 *Cherry Seedlings*, very nice.
20,000 *Apple* do two years old.
25.000 *Buckthorn Seedlings*, very nice for hedges.

Also Hybrid Perpetual, Climbing, and Moss Roses, Shrubs, Gooseberries, Currants, Raspberries, Strawberries, &c., &c.

Particular attention is called to our large stock of the following fruits, viz:

Apples—Wagner, Tompkins County King, Northern Spy, Primate.
Pears—Virgalieu. Bartlett, Louise Bon de Jersey, Glout Morceau.
Cherries—Great Bigarreau, Black Tartarian, Bauman's May, Early Purple Guigne.
Apricots—Dubois' Early Golden, Moorpark.

Geneva, Sept. 1, 1852—2t.

United States Agricultural Warehouse and Seed Store,

No. 197 Water Street, New-York.

THE subscribers solicit the attention of the public to the large and varied assortment of Agricultural and Horticultural Implements, Field and Garden Seeds which they have constantly on hand, and offer for sale at the lowest prices and on the best terms.

Aug. 1—tf. JOHN MAYHER & CO.

New Edition of American Fruit Culturist.

Just Published, by DERBY & MILLER, Auburn, N. Y.

THE AMERICAN FRUIT CULTURIST; containing directions for the propagation and culture of Fruit Trees, in the Nursery, Orchard, and Garden; with descriptions of the principal American and Foreign varieties, cultivated in the United States. By JOHN J. THOMAS. With over 300 accurate illustrations. SEVENTH EDITION; containing 40 pages of new matter, with full directions for the management of dwarfs and pyramids, besides some hundreds of smaller additions, and many new engravings. 1 vol—over 400 pages—price $1.

"A book of great value."—*Gen. Farmer.* "Worth its weight in gold-dust to any new beginner."—*Moore's Rural New-Yorker.* "It should be in the hands of every fruit grower."—*Ohio Cultivator.* "There is no vacant space in it—it is like a fresh egg—all good, and packed full to the shell."—*Prairie Farmer.* "The million who purchase it will find matter adapted to their wants, superior to any work as yet published."—*Cleveland Herald.* "An invaluable addition to our agricultural libraries."—*Wool Grower.* "Manifests careful and laborious research, close and continued observation, and an excellent systematic classification"—*Western Hort. Review.*

Aug. 1, 1852—2t.

NEW-YORK AGRICULTURAL WAREHOUSE.

A. B. ALLEN & CO.,

189 and 191 Water Street, New-York.

HORSE POWERS, Threshers, and Separators. The Endless Chain or Railway Powers of our own manufacture, both single and double-geared, for one and two horses, which has never been equalled for lightness in running, strength, durability and economy. They are universally approved wherever they have been tried.

2d. The Bogardus Power, for one to four horses. These are compact and wholly of iron, and adapted to all kinds of work.

3d. Eddy's Circular Wrought-iron large Cog Wheels, for one to six horses. A new and favorite power.

4th. Trimble's Iron-sweep Power, for one to four horses.

THRESHERS.—Improved Threshers made upon the best principles, threshing clean with great rapidity.

FAN MILLS for Wheat, Rye, Oats, &c., of the best construction.

RICE FAN MILLS made expressly for the South.

GARDEN AND FIRE ENGINES, very useful machines, arranged on wheels, for watering gardens or walks, and afford protection from fire. They will throw a strong stream 40 feet high, are easily worked and not liable to get out of order. Also, small Garden Pumps and Syringes of various styles.

HAY AND COTTON PRESSES.—Bullock's Progressive Power Presses, combining improvements which make them by far the best in use.

WATER RAMS, Suction, Force, and Endless-Chain Pumps; Leather, Gutta-Percha, India-Rubber Hose, Lead Pipe, &c.

CORN SHELLERS of great variety of patterns, to shell either by hand or horse power. Will shell from five to 100 bushels of corn per hour.

WAGONS and CARTS, double or single horse, suitable for the farm, the road, and heavy trucking.

GARDEN and CANAL BARROWS, light made or extra strong, as desired.

MEAT CUTTERS, capable of cutting fine for sausages, and other purposes, 100 lbs. or more per hour.

Southern plows of all sizes and patterns, the Double Mould Board or Fluke plow for furrowing and cultivating the sugar cane, &c.

Our implements occupy three large stores, and we believe they make up the largest and most complete assortment in America. In addition, we have a machine shop employing upwards of one hundred men, where any articles in our line can be made to order.

A. B. ALLEN & CO.,
June 1, 1852—tf. 189 and 191 Water st., New-York.

FIELD SEEDS.

AUSTRALIAN WHEAT.—Very superior. The berry of this grain is extra large, and makes the best of flour. It produces a greater average crop than any other variety now grown in New-York. Several years' experience in its cultivation, proves that it is less liable to rust or mildew than other kinds; and as the stalk is large and strong, it is also less liable to blow down or lodge. Price, $4 per bushel. Other varieties of wheat, such as the White Flint, Mediterranean, Black Sea, &c.

BUCKWHEAT, of the best kinds in market.

RUTA BAGA, or Swedish Turnep Seed. The Purple Top and other superior varieties.

TURNEP SEED.—Large White Flat, Long White, Red Top Flat, Yellow Aberdeen, Yellow Stone, and other improved kinds for the field or garden

A. B. ALLEN & CO.,
June 1, 1852—tf. 189 and 191 Water st., New-York.

PERUVIAN GUANO

AND other Fertilizers. Several hundred tons of first quality of Peruvian Guano, constantly on hand for sale.

Also, BONE DUST, PLASTER OF PARIS and POUDRETTE.

A. B. ALLEN & CO., 189 and 191.
Water-st., New-York.
Jan. 1—tf.

Improved Stock.

CATTLE, of the Durham, Devon, Hereford, Alderney, and Ayrshire breeds.

SHEEP, of the Native and French Merino, Saxony, South-Down, and Cotswold.

PIGS of the Lincoln, Suffolk, and Berkshire breeds.

From our long experience as breeders and dealers in the above kinds of stock, and our excellent situation for purchasing and shipping, we think we can do as good justice to orders, as any other house in the United States.

A. B. ALLEN & CO.,
Jan. 1, 1852—tf. 189 and 191 Water st., New-York.

A First Class Dairy Farm for Sale.

MY farm of 320 acres, four miles south of the village of Oxford, Chenango county, N. Y., and near the Chenango Canal. 250 acres are under high cultivation, durably fenced, and well and permanently watered. The remainder is well timbered. It has a large two story mansion, five large barns, and sheds and out houses, in good repair. The soil is deep and of superior quality. It is admirably adapted for a dairy, or for grazing and grain; has a fine orchard of choice grafted fruit; and for profit, health, and beauty of location, cannot be surpassed. It is fully supplied with farming tools, and about fifty head of cows and young stock, all or any of which may be had with the farm. The New-York and Erie Railroad furnishes ample facilities for forwarding produce to the New-York market at all seasons, and the route of the contemplated Albany and Binghampton railway, passes within a few miles of the farm. The farm can be conveniently divided. Price low—title perfect. Terms most easy.

G. VAN DER LYN,
May 1, 1852—tf. Oxford, N. Y.

Albany Drain Tile Works.

No 60 Lancaster Street—West of Medical College, Albany.

THE subscriber has now on hand, Draining Tile of the following descriptions. Prices reduced.

HORSE SHOE TILE.

Rise	Calibre	Price
5½ inch Rise, or	4½ inch Calibre,	$18 00 pr. 1000
4½ " "	3½ "	15 00 "
3½ " "	2¾ "	12 00 "

SOLE TILE.

Rise	Calibre	Price
4½ inch Rise, or	3½ inch Calibre,	$18 00 pr. 1000.
3½ " "	2¾ "	12 00 "

These Tile are over one foot in length, and are so formed as to admit water at every joint, draining land from 12 to 20 feet each side of the drain—being the cheapest and most durable article used.

Tile sufficiently large for drains around dwellings, at $4 and $8 pr. 100 pieces. Orders from a distance will receive prompt attention.

Albany, April 1, 1852—tf. JOHN GOTT.

New and Important Insurance.

Northern N. York Live Stock Ins. Co., Plattsburgh, N. Y.

INCORPORATED by the Legislature of the State of New-York, July, 1851. Horses, Cattle, and all kinds of Live Stock insured against Death, by the combined risks of Fire, Water, Accidents, Diseases, &c CAPITAL, $50,000.

GEORGE MOORE, Plattsburgh, Sec'y.
I. C. Mix, Fort Ann, Gen. Agent.
October 13, 1851.

This company are now organized and ready to receive applications for insurance. It is confidently believed that the owners of valuable animals will avail themselves of the advantages offered by this mode of protection. If fire, life and marine insurances are proper and expedient, so is live stock insurance: the reasons for insurance are equally applicable to all.

For terms please apply to Company's Agents.

Plattsburgh, July 1—tf.

EMERY & CO.'s

Improved Horse Power. Thrashers and Separators.

THE undersigned have been appointed sole agents for the sale of Emery's new patent Improved Horse Power, Thrashers and Separators in the city of New-York. The State Agricultural Warehouse is the only Depot where this superior power can be had. As many powers are represented as Emery's patent, to avoid impositions, be careful to observe that the name of Emery & Co., is cast in full on every link of chain and the wheel hub.

LONGETT & GRIFFING.
July 1—tf. 25 Cliff street, New-York.

MANURES.

PERUVIAN GUANO, 2¼ to 2½ cents per pound.
BONE DUST, when taken in equal quantities, $2.25 per barrel.
BONE SAWINGS, separately, $2.50 per barrel.
PLASTER, $1 to $1.25 per barrel.
POTASH, 3¼ to 4 cents per pound.
CHARCOAL, $1 per barrel.
SULPHURIC ACID, 2¼ to 2½ cents per pound.
SUPERPHOSPHATE OF LIME, 2½ cents per pound.
WOODS' RENOVATING SALTS, one cent per pound.

For sale at the State Agricultural Warehouse, No. 25 Cliff street, New-York. LONGETT & GRIFFING.

Aug. 1—2t.

Fowls for Sale.

AFTER August, the subscriber will have for sale Fowls raised this season, from the following stocks:

Shanghaes—Forbes' Buff, Marsh's do., Perley's do., Andrew's White, White's Black, and Kirtland's.

Cochin Chinas, the Queen's stock and Bailey's. Also, Black Spanish.

Warranted pure blooded. They have been bred with care, and are worthy the notice of breeders or fanciers.

Albany, N. Y., Aug. 1—2t. J. M. LOVETT.

FOR SALE,

50 EWES and a few Bucks from my flock, the wool of which has sold, for the last three years, for forty-seven cents a pound, and averaged from three and one half to three and three-fourth pounds per head.

For further particulars, address the subscriber at his residence, Canaan Centre, Columbia county, N. Y., or BLANCHARD and BURT of the Wool Depot, Kinderhook. DANIEL S. CURTIS.

Canaan Centre, Aug. 1, 1852—tf.

WATER WHEELS.

THE subscribers are making with success, Jagger's improved FRENCH TURBINE WATER WHEEL.

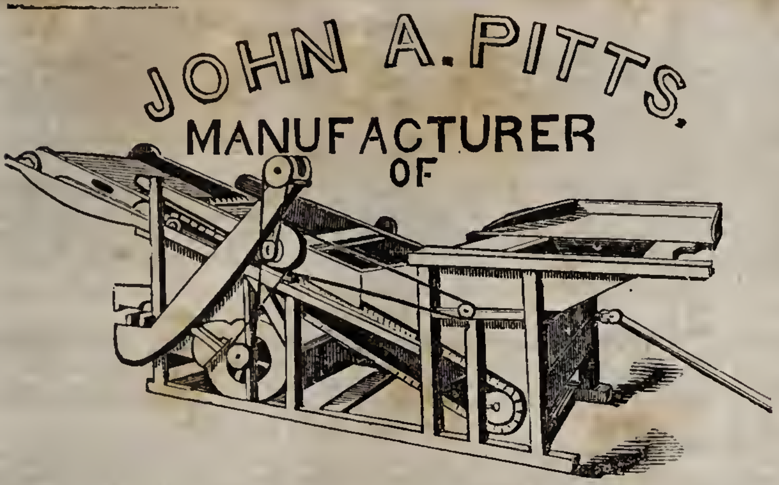
Tables showing the power and capacity of the same can be had on application. JAGGER, TREADWELL & PERRY,
Eagle Foundry and Machine Shop,
May 1, 1852—6t. No. 110 Beaver st., Albany, N. Y.

STOVES.

THE subscribers are prepared to furnish dealers with a full assortment of PARLOR and COOKING STOVES for coal and wood, on liberal terms.

Circulars giving particulars can be had on application.

JAGGER, TREADWELL & PERRY,
Eagle Foundry, No. 110 Beaver st., Albany, N. Y.
May 1, 1852—6t.



PITTS' PATENT SEPARATOR

AND

DOUBLE PINION HORSE POWER.

OWING to the increased demand, and being desirous of locating at a convenient point for shipping, I have removed to Buffalo, N. Y., and have erected a large establishment for the purpose of manufacturing the above celebrated Machines, for threshing and cleaning grain at one operation.

This is the same Machine that has stood, and now stands, unsurpassed by any Machine in existence for the above purpose. It has been exhibited at nearly all the State and County Agricultural Fairs throughout the United States, and always received the *first premium.*

The Machine has recently been much improved, enlarged, and rendered more substantial in all its parts. I therefore offer it to Farmers of the different wheat growing districts, to be all I claim for it, viz. *the best Machine* for threshing and cleaning grain, now in existence.

I also manufacture Pitt's Improved Endless Chain Two Horse Power and Separator—also Pitt's Corn and Cob Mill, for grinding feed for stock.

My Horse Powers and Separators are all warranted to be a better article than can be purchased at any other shop—and if they do not, on trial, prove to be so, I will take them off the hands of the purchasers at the price they may pay me for them.

P. S.—The Patent Right on the Separator has recently been extended for a further term of seven years, and all *infringements* on *said right* will he dealt with according to law.

JOHN A. PITTS.

Buffalo, N. Y., July 1, 1852—4t.

The Water Cure Journal.

A NEW VOLUME commences with the present July number. Published monthly, illustrated with engravings, exhibiting the structure, anatomy, and physiology of the human body, with familiar instructions to learners. It is emphatically a Journal of Health, designed to be a complete Family Guide in all Diseases.

TERMS.—Only One Dollar a Year, in Advance. Please address, post-paid, FOWLERS & WELLS, No. 131 Nassau street, New-York.

A few brief Editorial Notices may be acceptable to those unacquainted with this Journal. We copy:

From the New-York Tribune.

"The Water Cure Journal holds a high rank in the science of health; always ready, straight-forward, and plain spoken, it unfolds the law of our physical nature, without any pretensions to the technicalities of science, but in a form as attractive and refreshing as the sparkling element of which it treats."

From the Fountain Journal.

"Every man, woman, and child, who loves health, who desires happiness, its direct result, who wants to 'live while it does live,' 'live till he dies,' and really live, instead of being a mere walking corpse, should become at once a reader of this Journal, and practice its precepts.."

From the New-York Evening Post.

"*The Water Cure Journal.*—This is, unquestionably, the most popular Health Journal in the world."

THIS HYDROPATHIC JOURNAL now enters upon its Fourteenth Volume, with a circulation of *Fifty Thousand Copies.* The ablest medical writers are among its contributors, and all subjects relating to the Laws of Life, Health, and Happiness, may be found in its pages Now is the time to subscribe. August 1—2t.

Valuable Virginia Land for Sale.

I OFFER for sale between 700 and 800 acres of *land,* handsomely located in Prince George county, Va., lying immediately on Chip Oaks Creek, adjoining Lower Brandon plantation on the south, 25 miles from Petersburg. About 200 acres are cleared, and the balance tolerably well timbered with oak and pine. The cleared land was marled several years ago, and 1,000 bushels of marl, with 1,500 bushels of lime have been recently applied to it.

The improvements are a good brick house, with five rooms—from which there is a beautiful prospect of James River—a kitchen, smoke-house, stable, a barn with stationary horse power attached, and a well of good water. The buildings are within 300 yards of the main landing where vessels load with produce, wood, &c., and unload lime at seven cents per bushel. Marl abounds on the opposite side of the creek. The whole tract is well watered by springs and brooks, that run through fine meadow lands, a part of which are cleared.

I will sell it entire or in parcels to suit purchasers, as it can be advantageously divided into four farms. If not sold privately, (of which due notice wiil bo given,) before the 30th day of September next, I will sell it upon the premises, on that day, at public auction, without reserve.

Persons wishing to view the property, will leave the Richmond and Norfolk boat at Lower Brandon wharf on James river, three miles from the property; or I will give any information to those addressing me (post-paid) at Cabin Point P. O., Surrey county, Va.

Aug. 1—2t. E. T. FETTER.

Seed Wheat.

AUSTRALIAN WHEAT, Canada. White Flint, Soules, Mediterranean, in bags or barrels. For sale by

LONGETT & GRIFFING,
No. 25 Cliff street, New-York.

Aug. 1—2t.

Valuable Farm for Sale.

THE subscriber offers for sale four hundred and fifty acres of land, being a part of his homestead, and comprising two hundred acres of as desirable land as any in Addison county—lying on the main road four miles north of Vergennes on the border of Lake Champlain, and one mile from the Railroad Station. It is under good cultivation, and furnished with commodious buildings. The remaining 250 acres is wood land; a portion of it covered with a heavy growth of hemlock and other valuable timber, and the remainder with the best quality of wood for fuel. The property will be sold together or in parcels. Postpaid inquiries promptly responded to.

ROW'D T. ROBINSON,
Ferrisburgh, Addison co., Vt.

Aug. 1—tf.

Great Sale of Superior thorough-bred Short-Horn Cattle.

THE subscriber will offer for sale, his entire herd of choice Short-horns, comprising 50 head, young and old, at public Auction, on Wednesday the 13th of October, 1852, at 1 o'clock, P. M., at his farm 2½ miles from the city of Troy; reserving to himself one bid on five Cows and Heifers and one Bull, say six head in all, and these to be pointed out previous to the commencement of the sale; this bid will be made public when the six animals are brought to the stand for sale. Should any gentlemen advance on the single bid made by the proprietor, the highest bidder will be entitled to the animal. It is proper to say, the severe drouth in this vicinity reducing the hay crop one half, has decided the proprietor to make this sale at the time named, instead of next Juhe, which he had purposed to do.

The well established reputation of this herd in this Union, and in Canada, and the splended herd it has measurably sprung from, viz: the famed herd of that eminently English breeder the late Thomas Bates, Esq , renders it hardly necessary to comment upon its superior merits. It may not, however, be inappropriate to remark, that the establishment of this herd was commenced in 1838, and that the most careful attention has since been paid to its breeding, and that it now contains mostly all the reserved stock of two former public sales. And besides these he has now on the passage across the Atlantic, shipped 21st June, on board the Packet Ship Kossuth, Capt. Jas. B. Bell, a superior yearling roan Bull, having many crosses of the famed Duchess Bulls of Mr. Bates. Including this latter animal and the two beautiful red roan three year old Heifers, which came out from England last September, "Yarm Lass" and "Yorkshire Countess," and the beautiful Heifer Calf of the latter animal, got in England by the Duchess Bull 5th Duke of York, there will be 14 head of this imported stock, and its immediate descendants. There has been sold from this herd but three Heifers from these importations, and these cows were sold at $300 each. All the young bulls bred from these cows, except those now offered for sale, have also been sold at private sale, at $300 each, most of them while quite young.

Besides these 14 head of high bred animals, the noble premium cow Esterville 3d, bred by E. P. Prentice, Esq., of Albany, and the equally fine two year old, red and white Heifer bred by me, got by the Bates Bull Meteor, and three of the famed milking Willey tribe, the same tribe of cows as the Heifer Ruby, sold by me to Mr. S. P. Chapman of Madison county, and which cow was awarded the first premium by the N. Y. State Agricultural Society, for producing the largest quantity of butter in 10 days in June, and 10 days in August, on grass pasture only, being a fraction over 40 lbs. in those 20 days. There are other valuable tribes in the herd, as the printed Catalogue will show.

The catalogue will be ready for distribution about the 1st of August, aud will exhibit richness of pedigree rarely to be met with, showing the descent of most of the animals, from the best animals on record in the English herd book. Having received an invitation from H. Strafford last winter to forward a list of the pedigrees of my herd to he inserted in the forthcoming volumes of the English herd book, of which Mr. Strafford is now the editor, several pedigrees were sent to him of the animals here offered for sale, and will appear in said book.

A credit of 9 months will be given on all sums up to $300, and 9 and 18 months on all sums over $300, for approved paper, with interest, payable at some bank in this State. GEO. VAIL.

Troy, N. Y., Aug. 1—3t.

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Balsam Firs, Arbor Vitæ, and other Forest Trees.

HENRY LITTLE & CO., of Bangor, Maine, will furnish any number of Evergreen and other Forest Trees, taken up with *earth on the roots*, with the greatest care, and sent to any part of the United States by Steamers or Railroad—and carefully packed in large boxes, at short notice, at the following prices, viz:

From 6 inches to 1 foot, at 1 cent, or $10 per 1000.

From 1 foot to 2 feet, at 1½ cents, or $15 per 1000.

The above prices refer more particularly to Balsam Fir and Arbor Vitæ Trees.

We charge what the boxes cost, but nothing for packing.

For three years past, the trees we have procured and sent to a distance, have lived generally, and have given good satisfaction. Evergreens will not live unless taken up with great care.

Bangor, Sept. 1, 1852—2t.

Linnæan Botannic Gardens and Nurseries, Flushing, N. Y.

WM. R. PRINCE & CO., will sell off by the first of May next, the entire collection of Trees and Shrubbery from 50 acres of their Nurseries and the Greenhouse plants, the ground being wanted for building lots. The trees are equal to any ever grown, and comprise the choicest varieties, and sales amounting to $250 and upwards will be made at 12 months credit, for approved security. The stock of Pears on Pear and on Quince, and of Dwarf and Standard Cherries, Apples, Plums, Peaches, Grapes, Quinces, and other Fruits, is unrivalled and comprises 15,000 Fruit Trees of *large bearing size.*

Also 50,000 Evergreens, of every species and size, and all other Ornamental Trees of every size. 3,000 finest foreign Grapes, in pots, for Grape Houses. and 15 superior varieties of hardy Native Grapes. Five best species of European Osiers. A great stock of Camellias, Chinese Azaleas, and other Greehouse plants. An immense assortment of Bulbous Flower Roots, and Pæonies, and the finest collection of Strawberries in the union. Nurseries and Cemeteries can buy to great advantage. This is the proper period for transplanting Strawberries, Bulbous Roots, Pæonics, Rhubarb, &c.

Sept. 1—1t.

$1,000 Challenge.

I OFFER to place *one thousand dollars*, *cash*, into the hands of a party chosen, against *one thousand*, *to be paid* into the hands of the same party, by any manufacturer of threshers in the United States, if a machine can be found that will thresh and clean, fit for market. or seed, with the aid of *only two horses*, 100 bushels of wheat and rye, in less time than I can with my "Excelsior Wrought Iron Cylindrical Thresher and Cleaner." The grain to be thoroughly threshed, without white caps or broken, and the straw delivered long enough to stack, and free from chaff. The winner to receive the $2,000 with both machines and power.

An acceptance of the above must be in the hand writing and over the signature of the acceptor, stating his ability to pay the forfeit, and sworn to before any legally authorised person.

For circulars address JOSEPH G. GILBERT, 216 Pearl Street, New-York.
Sept. 1—1t.

Hay and Straw Cutters,

OF all styles and sizes, for cutting Hay, Straw, or Cornstalks; for sale at the United States Agricultural Warehouse and Seed Store, No. 197 Water Street, N. Y. JOHN MAYHER & CO.

Sept. 1—tf.

Seed Wheat.

GOLDEN Australian, Mediterranean, White Flint, Canada, Black Sea, Soul's, in bags or barrels. For sale at the United States Agricultural Warehouse and Seed Store, No. 197 Water Street, New-York. JOHN MAYHER & CO.

Sept. 1—tf.

Super Phosphate of Lime,

FOR farming purposes, put up in bags of 150 lbs. each. For sale by
JOHN MAYHER & CO.
Sept. 1—tf. No. 197 Water Street, New-York.

Ayrshire Bull for Sale.

I OFFER for sale my Ayrshire Bull Dandy, six years old, imported by Saml. G, Ward, of Lenox, Mass. For further particulars address J. C. TIFFANY, Coxsackie, Greene Co., N. Y.

Sept 1—1t.*

Straw Cutters! Straw Cutters!

A LARGE assortment of the best makes, viz: Forbes & Dones', Stevens', Clintons', Hovey & Co., and Hovey & Lazell's; Stalk Cutter's of Bentholf's, Sinclair and Bott's patent, at manufacturer's prices. State Agriculthral Warehouse.

Sept. 1—2t. LONGETT & GRIFFING, No. 25 Cliff Street.

SYRACUSE NURSERIES.

Thorp, Smith, Hanchett & Co., Proprietors, Syracuse, N. Y.

OUR Nursery grounds, amongst the largest and most extensive in the country, are now covered with a most beautiful stock of fruit and ornamental trees, shrubbery, roses, greenhouse plants, &c. We therefore invite particular attention to our stock of trees, which cannot be excelled in size, thriftiness and beauty, by those of any other establishment in the Union. *Nurserymen*, *Amateurs*, *Orchardists, and Venders*, are earnestly invited to call, examine, and judge for themselves.

Apples.—We have a very extensive assortment of all the best varieties in cultivation, both Dwarf and Standard.

Pears.—Our stock of Standards and Dwarfs is much better than heretofore, and we invite competition, as no finer can be produced. We have also, a few hundred Dwarfs, five years old, filled with fruit spurs, and which have borne freely the past two years, (now with a full crop,) that we will supply to those persons desiring fine fruit bearing trees.

Cherries.—Both Standard and Dwarf of all the newest and finest sorts, that cannot be excelled for beauty and thriftiness.

Plums, *Peaches*, *Apricots*, *Nectarines*, *Currants*, including *Victoria* and *Cherry*, and *English Gooseberries* of all the best leading sorts.

Our Ornamental Trees are of fine form and luxuriant growth and require only to be seen, to be admired.

Evergreens.—A fine assortment of Norway and Balsam Firs, Spruce, &c.

Pæonies.—A splendid collection of both tree and herbaceous varieties.

Dahlias.—Over 150 choice selected kinds, 25 cts. per whole roots

Roses.—One of the largest stocks in the country, of all the leading varieties, being about 10,000 plants.

Bulbous Roots.—A splendid collection just imported from Holland, of best double Hyacinths, Tulips, Crocus, &c &c.

Greenhouse Plants.—A large collection of the choicest and newest kinds, including the *new Heliotropes*, *Reptans de Santana*, *Erringii*, *Hoyas Bidwelliana*, *Imperialis and Bella*, &c.

Fuschias in 50 varieties, including *Spectabilis*, *Eliza Mclliez*, *Sir John Fastolff*, *Serratifolia*, *Prince of Orange*, *Pearl of England*, *Caroline*, &c.

Chrysanthemums.—A full assortment of all the best standard kinds in the country. Of the new Dwarf and Daisy varieties we have every thing new and rare, including 30 of the very best sorts.

Verbenas.—A splendid collection of 50 varieties including Hovey's New Seedling.

Strawberries.—All the best varieties including the three new Cincinnati sorts, one of which took the $100 premium.

Hedge Plants.—Buckthorns, Privet, Red Cedar and Osage Orange.

Seedling Stocks.—Nurserymen and others can be supplied with Apple, Pear, French Quince, Mahaleb, Doucain, and Paradise stocks by giving us notice in due time. The *fall* is the best time to ship trees to the South and West.

Our Catalogues, with full descriptions and prices, will be forwarded to every post-paid applicant, enclosing one letter stamp if under 500 miles and three stamps if over that distance.

Sept. 1—2t. THORP, SMITH, HANCHETT & CO.

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THE CULTIVATOR.

TO IMPROVE THE SOIL AND THE MIND.

NEW SERIES. ALBANY, OCTOBER, 1852. VOL. IX.—NO. 10.

Obituary of Prof. Norton.

MISFORTUNES never come singly. We had scarcely laid down our saddened pen, and cast an earnest look into the already darkened future, when another, in the bloom of his maturity, was called hence. Calmly, peacefully, trustingly, he has passed to the land of his faith, to the home of the blest, leaving regret to border the pathway he had trod, and tears to water in vain the hopes which his usefulness had awakened. Prof. NORTON is dead, aged only thirty.

> "Those the Gods love, die young,
> But they whose hearts are dry
> As summers' dust, burn to the socket."

The lives of the truly great are always instructive, and could we read them rightly, would teach us useful lessons, both in the sublime results which attend their labors and in the mode by which their greatness has been attained. While one whose talents and accomplishments have distinguished him among the wise men and scholars of his day lives, we admire only the proofs of his genius and ability; but when such an one is removed from our midst, we naturally inquire into the elements of his power. It is in this way that, when one is dead, he yet speaketh—speaks, not only in word and in deed, but in the more silent operations of the mind, which are marked in the successive grades of culture by which one rises to eminence.

Deeply as we deplore the loss of the most practical agricultural writer and thinker of the present time—one from whence the farming community expected much, and whose efforts promised more permanently beneficial results than those of any other man, we shall find that his life, though short, is full of instruction and replete with interest.

From his youth, Mr. NORTON had been more or less conversant with the practice of agriculture, and as is naturally the case with an inquiring mind, the apparent lack of system, and ruinous waste often seen, led to thought and investigation. After having pursued the study of chemistry with the ablest professors in this country, he visited Europe, in the summer of 1844, for the purpose of pursuing his studies farther than could be done here, and also to extend his observations. Mr. NORTON accompanied Prof. JOHNSTON on a tour through Scotland, the results of which appeared in his letters published in this journal. These letters, which were continued regularly during his absence, were his first introduction to the public as a writer, and established his reputation as a careful observer, a close reasoner, and a sound thinker. During his stay in Scotland he enjoyed the closet intimacy with Prof. JOHNSTON, and pursued his studies under his direction at the Laboratory of the Ag. Chemical Association. The analyses furnished by him from time to time, show the accuracy of his mind and his superior industry, and his notes on Prof. JOHNSTON's lectures are valuable abstracts, forming almost a complete text book of Agricultural Science. All his communications to THE CULTIVATOR are of permanent value, and show the condition of Ag. Science in Scotland at that time.

In the fall of 1845, he made a tour on the Continent, for the purpose of visiting some of the most celebrated laboratories, and his letters were for a time discontinued. Shortly after, he returned to this country, when he received an appointment to a professorship of chemistry, as applied to agriculture, which had been created at Yale College. Mr. NORTON wished to perfect himself in chemistry before entering upon his duties as Professor, and with this in view he sailed again for Europe in the fall of 1846. Here we notice a prominent characteristic of Prof. NORTON. There was nothing of pretension in his nature—he was unwilling to assume a responsibility till he felt himself fully equal to it. Instead of being vain of the honor thus early bestowed on him, he goes manfully and earnestly to work to lay, deep and strong, the foundations of a science, of which the first rudiments were scarcely known.

In the year 1846, a premium of fifty sovereigns ($250) was offered by the Highland and Agricultural Society of Scotland, for the best analysis of the oat. The chemical constituents and the physiology of the growth of this plant, were little known, and a scientific analysis had never been attempted. Mr. NORTON, still a student in the laboratory, and in competition with several learned chemists, obtained this premium. This is more remarkable from the fact that he was an American, and unknown to the scientific world. The article contains thirty-nine tables, showing the composition of the different parts of the oat, and at several stages of its growth, and displays a vast amount of research and an untiring industry. In the conclusion of the article, Mr. NORTON remarks—"I may be permitted to say, that the extent of this investigation, and the many points which I have been compelled to leave undetermined or doubtful, after eighteen months of constant labor, must convince those who entertain false ideas of the time and patience necessary for chemical researches of this kind, that they have erred in supposing the chemist able to do in a few days or weeks what can only be effected by the labor and study of many successive years."

How strangely does this language of a successful scholar contrast with the assertions of later, not to say riper chemists, who arrive at the most profound conclusions with an astonishing facility, and, in advance of public opinion, award to themselves the highest eulogiums.

During his stay in Europe Mr. NORTON studied with Prof. MULDER at Utrecht, Holland, one of the greatest physiologists and chemists of his day. His letters from Holland are admirable pictures of the rural aspect of the country. Upon his return to this country in the fall of 1847, he entered upon his duties at Yale. Though attendance on the lectures in his department was voluntary, and comparatively little attention had been paid to Agricultural Chemistry by the young men in our colleges, he soon gathered a class of students, which was gradually increasing to the time of his death. His laboratory was, in fact, the only place in this country where the principles of science as applied to agriculture, were thoroughly taught.

The cares of his professorship were not his exclusive occupation. A treatise on Scientific Agriculture, which was written as a Prize Essay, and took a premium of one hundred dollars, offered by the N. Y. State Ag. Society, and was subsequently published as a text book for schools, was prepared by him in 1850. This little work embodies all the fundamental principles of Agricultural Science, so far as well established, and has been widely circulated.

Prof. NORTON also wrote an appendix to Stephens' Book of the Farm, together with notes, such as to adapt it to this country. In the Cultivator for January, 1850, Prof. NORTON commenced a series of letters, which were continued without interruption till his sickness. These communications were of such a practical nature, and so well adapted to the wants of farmers, that they constituted one of the chief attractions of the Cultivator. His views of scientific farming were not of that ultra, radical sort that empirics love so well to dwell upon, but rather the more rational and common sense ideas, which a knowledge of the real condition of our farmers and their interests, combined with sound discipline of mind, would naturally form. If his style lacked ornament, it was because the frame work he had to build was too vast a structure to admit of decoration—if he rarely called imagination to his aid, it was because he was too intent upon the stern realities of things—if he seldom manifested any great enthusiasm, it was because he was conscious of having only entered on a work whose triumphs still lay in the unexplored future. Thoughtfully, carefully, steadily he was laying the foundation on which, in after years, he might rear as proud a monument as science ever wrote her name upon. Agriculture in this country had much to hope for in his efforts; for he bent the undivided energies of his mind to its advancement. His whole soul was in the work—he had the confidence of every one, and with no other person could the interests of our rural population be so safely entrusted as with Prof. NORTON. Upon whom will his mantle fall? Who will arise to guide through the shoals and quicksands of reckless imposture, the noble ship of American industry?

We have not space enough to speak of particular articles of Prof. NORTON's, nor to notice the many addresses which he delivered at intervals before Agricultural Societies and the community generally. Suffice it to say, that everything he wrote, and everything he said, was marked by the same uniform prudence, the same careful judgment, which characterises the man. He was never led into error—never ran head-long into chimeras and fanaticism, and so was never obliged to retract what he had said, or retire from positions he had taken.

When the project of the University of Albany was broached in 1851, Prof. NORTON entered warmly into the plan. He had felt deeply the need of such an institution, and knew the obstacles which lay in the way of the students of Agriculture and the Natural Sciences. He advocated it as the best means of securing a permanent basis to our Agricultural Interests, and forming a nucleus for science in this country, The lectures, which he delivered in the winter of 1851-52, before a class which was gathered in Albany, were popular and instructive. He had a rare faculty of expressing in plain language his thoughts on the most abstruse subjects, and also of holding the attention of an audience to his theme. The severe labor, attendant on delivering courses of lectures at New Haven and at the University of Albany, materially impaired his health, and before the close of his lectures, he was obliged to leave for a warmer climate. Strong hopes were entertained, at first, of his recovery, but Providence had otherwise ordered. After his return to the north, he sank slowly to his end. Though conscious that he must leave a world which was just opening to his ambition, and a circle of friends who fully appreciated his worth, he was cheered on by that christian hope which had been his guide and solace during life. The exchange of worlds is for him a happy one, but his loss will cast a shadow on many a heart.

His character was in the highest degree estimable, and his virtues were of that quiet, unobtrusive nature, which steal so readily into the affections of every one. He was eminently fitted to grace the social circle, and his pleasing, artless manner, winning address, and animated style of conversation, made his society peculiarly desirable.

The personal friends of Prof. NORTON mourn one who was endeared to them by the closest intimacy,—the scientific world, one of their brightest lights, and the readers of the Cultivator, a most valued correspondent. Thus in the space of five short weeks, have we been called to write the obituaries of the two most prominent Horticultural and Agricultural writers of the day, men whose places cannot well be filled, and whose memories will long be cherished by every lover of his country.

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HIGH PRICE OF WINTER PEARS.—Robert Thompson states in the Journal of the London Horticultural Society, that in January the scarcity of winter pears is such, that Jersey Chaumontels [an old but good pear] make their appearance, imported at the high price of not unfrequently *five pounds per hundred.* This is more than twenty-four dollars—or about twenty-five cents each by the hundred. Would not an acre or two of winter pears afford some profit, if rightly managed? If four specimens sell for a dollar at midwinter, what would fine Easter Beurres bring at the opening of spring?

The State Fair at Utica.

It is gratifying to observe the continued improvement in the value and utility of our State Fairs. Instead of forming mere shows for the attraction of idle curiosity, they are yearly becoming more useful as disseminators of valuable knowledge. Instead of being mere carnivals, they are assuming a high rank as schools of rural art. In accordance with this improvement, less attention than formerly is given to show in preparation, and more to convenience and order. When we look back some years, and compare our present with former fairs, we cannot avoid a strong feeling of gratification at the general advancement which has been made, both in the general plan, and in the details of management. When we remember the great and multifarious machinery which must be set in motion for conducting the business of a single annual exhibition, the many thousands of objects to be entered, labelled, and arranged, and the many ten thousands of persons admitted to view them, a feeling of admiration, rather than of censure, should be the result. So long as those who visit them regard the aqnisition of the vast amount of knowledge they furnish as their chief attraction and value, little dissatisfaction will be felt when they do not happen to receive premiums; and remembering that when many ride the same horse, all cannot be foremost, they will derive a high degree of pleasure in so easily availing themselves of the superior improvements which others have made.

The grounds at Utica were unusually spacious and commodious. About fifty acres of very smooth land had been enclosed, and ample room thus afforded for the general distribution of the vast crowd. With one exception, the halls for exhibition were broad tents, which answered the purpose of both convenience and economy. A free use of the water cart prevented the annoyance of dust, and contributed much to the comforts of the spectators.

The exhibition of Cattle was large. There were 147 entries and about 550 animals upon the grounds. A distinguishing feature was the large display of Devons, among which there were so many beautiful animals, that it is quite out of the question to point out those which pleased us the best. We well remember when but a few years since, the only exhibition of this breed consisted of the herds of but one or two exhibitors—now, large numbers were sent from nearly every portion of the state. The Durhams were less numerous, but furnished some very fine animals. S. P. Chapman's celebrated bull "Halton," was a general favorite. Several other fine animals were observed in the herds of J. M. Sherwood, Wm. A. Brown, W. Bullock, and others. Of Herefords, fine animals were exhibited by W. H. Sotham, of Geneseo, and Erastus Corning, Jr., of Albany. A very interesting herd of grade Herefords, bred from the stock of Wm. H. Sotham, consisting of about fifty head, was exhibited by George Clark, of Otsego county. They comprised cows, calves, heifers, steers and working oxen, and were in ordinary condition, having never been pampered nor highly fed. Of Ayrshires, E. P. Prentice, of Albany, J. C. Tiffany, of Coxsackie, and James Brodie, of Ellisburgh, were the principal exhibitors. A yearling bull, belonging to the latter gentlemen, attracted a great deal of attention on account of his fine form, appearing, as a by-stander remarked, "as if he had been turned in a lathe." The forty head of Kentucky cattle, grade Durhams, from John W. Taylor were also an interesting exhibition. A large collection of native working oxen were on the grounds, among which we observed ten very fine yoke from James S. Wadsworth, of Geneseo, fifteen yoke from George Sheldon, of Conquest, Cayuga county, and about forty yoke from different individuals in the town of New-Hartford. The native red three-year steers of H P. Potter, exceeded in symmetrical form any animals of this kind we had seen.

There were 239 entries of Horses. The finest thorough-bred stallion was admitted to be J. B. Burnet's old horse "Consternation"—there was also a beautiful two year colt from this horse, about two years old. "Gen. Gifford," and a colt of his stock owned by Chas. W. Ingersoll of Lodi, Seneca county, were among the best Morgan horses.

The exhibition of Sheep was good. There was a fine exhibition of long wools, and some excellent French Merinos. A ram of the latter breed, owned by J. D. Patterson of Chautauque county, was a monster. We had the curiosity to measure him, and although a handsome, well-proportioned animal, his head was found to be a foot long, his horns each over four inches in breadth, and from the tip of his nose to the beginning of his tail, full six feet. The wool was observed to be quite fine, more so than usual on animals of this class. He is said to have sheared about thirty pounds, and to require less food for the wool yielded, than common sheep. Whether the strength, and the consequent difficulty of handling sheep of such size, would be a serious objection to their general introduction, farmers can best judge for themselves.

The Swine were not numerous but contained some fine animals.

The Poultry afforded quite an interesting display to *fowl-amateurs*. They were so numerous that their cages occupied the four sides of a large barn situated within the enclosure, and around which a temporary veranda was built for their protection from the weather. The largest exhibitor was D. P. Newell, of Rochester, who took a large share of the premiums. There were many beautiful specimens from other individuals.

There was a good display of Agricultural Implements. A greater number of reapers and mowers were on the ground than at any previous fair, and they included most of those which were tried last summer at Geneva. J. Rapalje, of Rochester, presented the largest collection of plows, harrows, straw-cutters, and other implements. Emery & Co., of Albany, exhibited an improvement in Hovey's straw-cutter, which is now probably the best straw-cutter with knives on a cylinder. The knives being thinner (and stiffened by a twist) are more easily sharpened; being set without any central cylinder, they are within smaller compass; and, diverging considerably, never become clogged; while the same work is done with a less costly machine. This straw-cutter was found to work with great ease. It is admirably adapted to cutting hay and straw, but not corn-stalks. A portable cider-mill, exhibited by D. F. Phillips, of

Ashland, Ohio, was remarkable for its compact form, neatness, and efficiency.

The exhibition in Dairy Hall, although not large, furnished many excellent productions. The two large cheese of J. Williams, Rome, weighing over 500 lbs. each, attracted much attention, and the committee for their examination stated that they were of the highest quality, being fully equal in this respect to any of the smaller cheeses. We observed in the same tent, besides a large collection of grains and seeds, a handsomely arranged collection of English grains from Charlwood & Co., of London, and a neat case of the varieties of Indian Corn from R. L. Colt, of Patterson, New-Jersey.

A large portion of the contents of Mechanic's Hall consisted of the *stoves*. If these do not soon reach perfection, it will not perhaps be for a want of ingenuity and numbers in their manufactures. We observed that most of them, and including some of the neatest specimens, were new inventions, being marked with the year 1852.

Manufacturer's Hall contained as usual a very large miscellaneous collection, including many brilliant specimens of skill, of which our present limits forbid an enumeration.

The exhibition of *vegetables* was the best that has ever been made at a State Fair. The tables in the tent devoted to them, were literally piled to their utmost capacity, with a profusely rich collection of every thing the kitchen garden produces, of uncommonly fine and large growth. Among many contributors, we observed more particularly the names of H. G. Dickerson of Lyons, and N. Culver of Arcadia, both in Wayne county, attached to very fine specimens.

Floral Hall, as usual, formed a very interesting part of the exhibition. The large tent, 140 long, and nearly 100 wide, devoted to fruit and flowers, was arranged internally with a simple view to the convenience of exhibitors, and the accommodation of spectators, with no costly expenditure for the sake of show—contrasting most favorably in this respect, with the arrangements in some former years. In the present instance the outer portion of the tent was left entirely open for the free passage of the multitude, the fruits and flowers occupying the central part, and thus in a great measure obviating the squeezing and "boring with elbow-points," always resulting from a confined passage.

Among the contents of Floral Hall, the collections of pears exceeded any thing of the kind in former years. Hovey & Co. of Boston, presented 104 varieties, and Ellwanger & Barry 180 varieties. Both of these contained some sorts of great rarity. Henry Vail, of Troy, exhibited 70 varieties, the largest amateur collection. J. Morse of Cayuga, presented 60 sorts, and T. C. Maxwell & Co., of Geneva, C. Reagles, of Schenectady, Thorp & Co., of Syracuse, and A. Frost & Co., of Rochester, about 30 to 40 sorts each. As indicative of those varieties most generally held in high estimation, we name the following, which were found to a greater or less extent in all these collections;—Bartlett, Belle Lucrative, Dix, Autumn Paradise, Flemish Beauty, Bosc, Gray and White Doyenne, Doyenne Boussock, Diel, Urbaniste, Onondaga, Louise Bonne of Jersey, Seckel, Glout Moreeau, Stevens' Genesee, Gansel's Bergamont, Fulton, Passe Colmar, and Winter Nelis. Apples were in fewer numbers than usual—the largest collections were 60 sorts from Ellwanger & Barry, 82 from J. J. Thomas, 50 from J. Morse, and lesser quantities from a few others. Some fine specimens of the Hawley were exhibited by James H. Watts, of Rochester.

The show of peaches was very meagre, the crop through most parts of the state having proved a failure. The only fine specimens that attracted much attention were from J. Morse, of Cayuga, and H. G. Dickerson, of Lyons—the former presenting about 30 sorts—and some very fine Early Crawfords were observed in the collection of the latter. Many beautiful dishes of plums were contributed by citizens of Utica, which appears to be an admirable locality for this fruit, the trees being heavily loaded with their crops. The largest exhibition of plums was nearly 40 varieties, from C. Reagles, of Schenectady.

The finest grapes were those from H. L. Suydam, of Geneva. Bunches of Black St. Peters weighed three pounds, and of Zinfindel, over two and a half pounds. These were raised in a small "cold house," of very simple construction, on the sunny side of his carriage house, and which he manages entirely with his own hands, during the few minutes each day, of leisure from business. He ascribes his great success to the free use of soap suds as a watering to his inner border, which is entirely suspended as soon as ripening commences, and a high heat given at the same time, ranging often as high as 115° Fah. Fine specimens of grapes were also exhibited by S. H. Ainsworth, of West Bloomfield, J. Greig, of Canandaigua, A. Frost & Co., of Rochester, and H. Vail, of Troy.

Among the Flowers were some fine Dahlias, Verbenas, and Fuchsias, which constituted the chief portion of the exhibition. Most of the greenhouse plants were contributed by the nurserymen of Rochester and Syracuse

On the last day of the Fair, several thousands assembled under a broad tent, to hear the annual address from Horatio Seymour, of Utica. It was able, interesting, and occasionally eloquent. It was devoted chiefly to the importance to farmers of *well directed* application of knowledge and of physical means, and urged with great force, the indispensible necessity of exertion, energy, and enterprise in the cultivators of the soil, if they would keep pace with the advancement of the present day, and the competition with which internal and foreign commerce is surrounding them.

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Corn Curing.

Eds. Cultivator—In the July No. I see a call for experiments in corn raising, &c. I will state for the benefit of your correspondent, H. W., of Ira, N. Y., and others who wish to get the most sound corn, without regard to the stalks for fodder. Last year the season was short at both ends for the corn crop, being wet and cold in the spring, and frost early in the fall, and many of the farmers in my neighborhood had not one-half of a crop of sound corn.

I planted some four acres on high land descending to the south and east; there was a strip across the piece, some two rods wide, too wet for corn in a wet season;

when my corn was fit to cut up at the root, there was some twelve or fourteen rows across the piece, that to appearance had not a sound ear of corn. I left those standing till the corn cut by the root was cured sufficiently to husk. I then cut the standing rows at the ground, and carried it in for husking; contrary to my expectation, the fourteen rows were as sound as any portion of the crop, and ready for cribbing up—while that cut by the root before any frost, I had to spread to dry before I could put it in crib safely. From my experiments, I conclude that we may get more sound corn, when the crop is late, by letting it stand and cure in the hill, but the fodder is not of much value. My corn was cut up the 25th and 26th of September, and drawed in for husking the 18th and 20th of October; had an average crop for my vicinity, of 25 bushels of sound shelled corn, to the acre. B. H. M. *Morris, Otsego co., N. Y., July* 20, 1852.

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The Vermont State Fair.

The second exhibition of the Vermont State Agricultural Society was held at Rutland on the 1st, 2d, and 3d of September. When a year ago the first impromptu gathering of Vermont farmers was announced, its success was considered quite problematical. There have been for a long time many intelligent and enterprising farmers in the Green Mountain State, but the interest in improved culture had not become general enough to justify any competition with the older states. The farmers felt too much pride to throw open to the gaze of an emulous brotherhood the products of their hills and valleys, and their mechanical skill, when aware that they must fall below the standard of states less rich in natural resources. This feeling has been so far overcome—thanks to the well-timed efforts of far-seeing and ambitious men that a State Agricultural Society has been formed, and without the incitement of premiums or the hope of reward, the farmers came, strong in numbers, and stronger still in purpose, to their fair. The result was gratifying in the extreme, and none expressed so much surprise at the character of the exhibition as Vermonters themselves. Their mountains had interposed a barrier to their acquaintance, and now, when their railroads had brought them around these tree-crowned summits, and together in generous rivalry, they seemed agreeably disappointed in each other's prosperity.

The display of Agricultural Implements and the products of mechanic art, was quite limited; yet on the whole creditable. Manufacturers from other states were well represented. The Endless Chain Horse Power of H. L. Emery of Albany, N. Y., and the Mower and Reaper of J. H. Manny, of Illinois, attracted considerable attention.

One of the most interesting displays was that of iron ore, manganese, fire clay, &c., by the Brandon Iron Co., together with specimens of manufactured articles, which reflect credit on the taste and skill of the gentlemen concerned. The same company exhibited a specimen of fossil wood, called lignite, which is at present exciting considerable interest in the scientific world. A bed of this lignite has been discovered, which has been excavated to the depth of eighty feet, without finding its bottom, and running in spurs to the surface of the ground. It is used successfully as fuel in driving an engine, burning freely, though leaving a large proportion of ash for its bulk.

Fine samples of flint and other ware were shown by the Bennington Co., which in point of finish, variety, and beauty of form, cannot be outdone.

The show of flowers, drawings, paintings, and needle work, though lacking in variety, displayed much taste and proves that experience only is needed to make Vermont equal to her sister states in this department of fine arts.

It was easy to see that the farmers prided themselves most on the superiority of their horses and sheep. The horses formed the great centre of attraction, and, we think, fully deserved the praise so freely lavished on them. We have never seen better horses, whether speed, bottom, action, or beauty, be regarded. As the well-trained and high spirited animals moved round the track, we were inclined to decide in favor of each successive competitor for the good will of the admiring crowd.

After the speech of Mr. Seward on Thursday, the famous Black Hawk, rode by Mr. David Hill, as vigorous and active as ever, followed by fifty or more of his colts, many of which compare favorably with their sire, and the Green Mountain Morgan, rode by Mr. Silas Hale, also supported by a numerous progeny, and other animals of the same breed, passed in procession twice round the course, forming the most splendid display of horses, probably ever witnessed in this country. On the afternoon of Friday, the fair was closed by the ceremony of crowning Black Hawk and the Green Mountain Morgan with wreaths of flowers, which had been provided by the ladies. The animals wore their prizes with becoming dignity and pride, and as they moved off with their honors, the air rung with cheers for the two "best horses in the world." The rivalry in displaying to the best advantage the good points of horses is in itself well enough; but we were pained to observe that *jockeyism* was quite too prevalent among the young men. When they abandon the ordinary vocations of the farm to train *fast horses*, the sterling interests of agriculture will languish, and real progress be checked.

The show of sheep was large, and fully sustains the high character which Vermont has borne for fine animals and superior wool. Messrs. Jewett, Morse & Co., of Middlebury and Shelburn, and Messrs. A. L. and M. Bingham of Cornwall, were the principal exhibitors of French Merinos. These gentlemen are deserving of great credit for their efforts to introduce these excellent sheep, and we learn that extensive sales were made at remunerating prices. Silesian sheep were shown by Mr. Campbell of Westminster—certainly a valuable stock, bearing fine wool and in large quantity. Spanish sheep were shown by Mr. Hammond of Middlebury, Mr. Pettibone of Manchester, and others.

There were improved cattle, poultry, and swine, on exhibition, but we did not learn the names of their owners, nor can we speak particularly of their merits.

The address of Hon. Wm. H. Seward, of New-York, is worthy of special notice, as the prominent ideas embodied in it, are such as commend themselves to the attention of every intelligent farmer.

After alluding to the early history of Vermont, its natural advantages and the proofs of her industry and prosperity around him, he said, to improve agriculture is wise; for as is the culture of the fields and flocks in any community, so is always the culture of the men and women by whom it is bestowed. He considered it essential that the business of the farmer should be made more lucrative. It was equally necessary in farming as in other pursuits, to substitute mechanical power for human labor. A constant and uniform relation must always be maintained between the state of agriculture, and indeed of society, and the cotemporaneous state of invention in the arts. He alluded to the comparative condition of American industry as exhibited at the World's Fair, and argued the necessity of increased attention to manufacturing interests. If farmers would distinguish the generation to which they belong, they must have a wiser and more enlightened system of agriculture. This prevailing indifference to agricultural science cannot be suffered to continue. Other nations are busy in improving their systems of agriculture, and will continue to improve, and and we must not neglect to follow, or still better, take the lead. There is no lack of schools or professors adapted and qualified for advancing agriculture. The greatest want is that of pupils. No one wishes to study agriculture—the farmers' sons are adverse to it generally. They do not intend to pursue the calling—the prejudice against farming is hereditary. The farmer himself is not content with his occupation, nor his wife any more so. They regard it as an humble, laborious, toilsome one; they fret about its privations and hardships and thus unconsciously create a disgust for it in their children's minds.

> "The prejudice, however, must be expelled from the farmer's fireside: and the farmer and his wife must do this themselves. It is as true in this case as in the more practical one which the rustic poet had in view:—
>
> "The wife too, must husband, as well as the man,
> Or farewell thy husbandry, do what thou can."
>
> Let them remember that in well constituted and highly advanced society like ours, intellectual cultivation relieves men from labor, but it does not at all exempt them from the practice of industry; on the contrary, it obliges the universal exercise of industry; and that notwithstanding the current use of the figures of speech, "wearied limbs, sweating brows, hardened sinews, and rough and blackened hands," there is no avocation in our country that rewards so liberally with health, wealth and honor, a given application of well-directed industry, as does that of the farmer. If he is surpassed by persons in other pursuits, it is not because their avocations are preferable to his own, but because, while he has neglected education and training, they took care to secure both.
>
> When these convictions shall have entered the farm house, its respectability and dignity will be confessed. Its occupants will regard their dwellings and grounds not as scenes of irksome and humiliating labor, but as their own permanent home, and the homestead of their children and their posterity. Affections unknown before, and new-born emulation will suggest motives to improvement, embellishment, refinement, with the introduction of useful and elegant studies and arts, which will render the paternal roof, as it ought to be,—attractive to the young, and the farmer's life harmonious with their tastes, and satisfactory to their ambition. Then the farmer's sons will desire and demand education as liberal as that now chiefly conferred on candidates for professional life, and will subject themselves to discipline, in acquiring the art of agriculture, as rigorous as that endured by those who apprentice themselves to other vocations."

The speaker alluded to the political power in the hands of farmers, and the importance of intelligence, wisdom and virtue to secure its right use. The expansion of our country will, year by year, call for increased attention to the conservative interest.

The address was listened to with marked attention, and cannot fail to do good. We trust many returned to their homes impressed with a higher sense of the dignity of their position, and higher aims for the future.

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The Onion Fly—*Anthomyia ceparum.*

Eds. Cultivator—A short time since, in travelling through the county of Essex, particularly along the beautiful plains in the vicinity of the Au Sable river, I had my attention repeatedly attracted to the sickly and withered appearance of nearly all the fields of onions, through which I passed; upon inquiring the cause, I was invariably told that it was the effects of a worm, and that it was extremely doubtful if a single tuber, in a healthful state, would be obtained from a thousand plants. On raising the bulb from the earth, I had little difficulty in recognizing the larva of a Dipterous insect, and one of a species which, in England, and many other parts of Europe, for the last few years, have almost entirely destroyed the onion crops, upon which so considerable an amount of labor and experience, have been expended in their cultivation. To such a degree have their ravages extended, that the husbandmen in those countries, have been driven to the necessity of giving up the culture of this important vegetable in despair, not having yet met with any efficient remedy for their destruction.

Much uncertainty still seems to prevail among entomologists, respecting the peculiar habits of this little depredator, and we much fear that they will long continue to remain in ignorance, unless some intelligent and interested individual, residing on the spot, and has daily access to the plants, establishes a series of practical observations on their habits, and so traces them through their various stages of existence to the perfect fly. Until this is accomplished, and not till then, will we, with any degree of certainty, be able to suggest any reasonable method for effectually removing them. If it be not done speedily, we greatly fear,—from a knowledge of the prolific manner of their increase,—that they will, in the course of but a few years spread all over the land, and almost, if not entirely, obliterate this highly useful vegetable from our gardens.

This insect depredator, will, I think, undoubtedly prove to be the *Anthomyia ceparum* of Meigen, or a species so closely allied, as to differ but little from it, in any of its habits. It belongs to the second general division of the *Muscides*, that of the *Anthomyzides*, which are composed of species all of which have greatly the appearance of common flies.

The *larvæ* is about one-third of an inch in length, fleshy, and of a white color. It is of a conical form, with a smooth and shining surface, and entirely free from any external, superficial appendages. The incisions are finely granulate, and the last and largest segment is obliquely truncated at its base, upon which is placed a surrounding border of eight small knobs, or projecting points. The insect deposits its eggs at the base of the plant, near the surface of the ground, which, in a few days, become hatched; the larvæ immediately penetrating between the leaves to the bulb, upon which it preys unseen; but the effects soon become visible, for the leaves turn yellow, fall prostrate on the ground, and quickly wither away. In the course of about two weeks they arrive to maturity, and change to the pupa state, and in from fifteen to twenty days more come out the perfect fly, fully prepared to accomplish their depredations, by depositing their eggs upon the more healthy plants. As many as from one to five of the larvæ are frequently to be met with on a single plant.

The perfect insect is about half the size of the common house fly, with a few thinly scattered hairs covering the surface of the body. It is of an ash grey color, the males being distinguished by a series of dark stripes upon the back. The head is marked with a brownish spot upon its apex. The wings are exceedingly transparent, exhibiting beautiful iridescent reflections from their surfaces, and the shoulders of which are of an ochery-brown color, and the veins of a brownish yellow.

This fly may not unfrequently be met with in the spring of the year, basking in the sunshine about the windows of the neighboring dwellings. And from the circumstance of finding the larvæ in the greatest profusion, committing their depredations in the middle and latter parts of August, we are inclined to believe that they pass through several generations in a season, and that it probably makes use of the seeds of the plant on which to deposit the egg for the larvæ of the ensuing spring; if this be so, by steeping the seeds in brine, before sowing, we should suppose would be the proper remedy; if otherwise, the process will not materially effect their germination. They appear to show a distinct predilection for the white onion, in preference to that of any other color.

This insect is exceedingly difficult to destroy. Strewing the earth with ashes has proved of little avail; powdered charcoal answers a much better purpose, and is the one most generally in use, but it should only be thrown over about two-thirds of the bed, so as to leave a portion of the plants for them to resort to on being brought to the perfect state, and driven from their original resting place. When they have been converted to the larva state and commenced their depredations, these plants should be pulled up and consumed with fire.

It has been recommended to prepare the beds as early in the spring as convenient, and suffer them to remain eight or ten days, for the noxious plants to vegetate, then to cover them with straw to the depth of ten inches, and burn them over; after which plant the seeds immediately. This process, it is stated, has proved perfectly successful in driving away the insects and procuring good crops, and in addition, has furnished a capital top dressing to the soil. Onion beds prepared from the hearths upon which charcoal has been burned, have likewise been mentioned as producing the perfect vegetable entirely free from the attack of worms.

Should this charcoal method here mentioned, be universally adopted, we have little doubt but that this insect will in a short time become greatly reduced in numbers, and afford a much better chance for a more healthful crop of the onion plants hereafter. J. Eights. *Albany, Sept.* 1, 1852.

Thorn Hedges.

Eds. Cultivator—As our wood-lands are getting short of wood for fences, it is time for us to be looking out for something more durable. I have thought about thorn hedges, and I may give your readers some information on the rearing and planting of these hedges.

The seed is gathered from the thorn in autumn, and mixed up with dry earth; through the winter, (this is the manner in Scotland,) and in the spring, they sow them broadcast in beds; the first year part of them come up and grow through the summer, when they are transplanted in the spring in the nursery; and for two succeeding years they still come in the beds. They then let them grow two or three years before they plant out into hedges, when the nurseryman puts them into bunches of one hundred each, and cuts the small tops and roots off, and they are ready for planting. There are various ways, sometimes on level ground, but the common way is in ditches. We will take that way. Say the fence is to be made along side of a road—the men employed to be provided with a spade, a shovel, and pick or mattock—the latter being necessary when the ground is hard and stony. The first thing to be done is to set up two sticks, one at each end of the ditch; then set in two or three more in a straight line, and stretch the line along the stakes; then with the shovel, (the shovel is such as those they call the Irish shovels, only a little larger, and the handle no longer than a spade handle,) the line being stretched along the stakes, he turns his face to the road, and cuts along the line with his shovel, sloping back considerably; then turns back and cuts the other way, at about a foot from the other line; next he cuts across the sod and turns it over, but keeps it back about four inches from the lip of the ditch, so that it forms an offset called the water table. They then shovel some of the best soil from where they took out the sod, and level it all off ready for the thorns. Then take a bunch of thorns and lay them on a level, with the roots into the ditch, with their tops scarcely out of the edge of the sod, so that they will not be hanging by the roots when the frost moulders away the earth. They are laid about three inches apart. This done, they shovel out of the bottom of the ditch on top of the thorns, until the ditch be two feet, and sometimes more, deep. They then clap all along the face of the ditch, to make it solid and compact. It is then finished with exception of the fence. The fence is made by driving stakes on the top of the ditch, four to the rod, and nailing on two boards, three or four inches broad.

I have been a long time in this country, and have had an opportunity of trying experiments, and I find that thorns from the old country do not thrive well here. Whether it is owing to the climate, or the snow lying so deep on them in the winter, I do not know.

I am now about to make some inquiry among your many readers, as to how the thorn in this country would do. I have read your Cultivator several years, and I do not remember to have seen anything with respect to that, except the Osage Orange hedges, and that yet remains to be proved. Will you please inform, through the columns of the Cultivator, whether any one has made the experiment, and how they have succeeded, and how they were planted? Robert Shiell. *Hammond, St. Lawrence Co., N. Y., May* 5, 1852.

State Agricultural Society Fair.

Award of Premiums, Utica, 1852.

CATTLE.

SHORT-HORNS—*Bulls, three years old.*

1. S. P. Chapman, Clockville, Madison county, Halton,......... $30
2. Wm. H. Bullock, Bethelem, Copson,...... ..... Trans. and 20
3. Wm. H. Brown, Peterboro', Madison county, Comet,....... 10

Two years old.

1. J. M. Sherwood, Auburn, N. Y., Vane Tempest,............ 20
2. William Osborne, Waterville, Oneida county, Grand Duke,. 15
3. William Rathbon, Springfield, Otsego county.............. 10

One year old.

1. J. M. Sherwood, Auburn, N. Y., Gen. Putnam,............. 15
2. M. D. Bailey, Wampsville, Madison county, Grand Duke,... 10

Bull calf.

1. J. M. Sherwood, Auburn, N. Y., La Fayette,.............. 8
2. Wm. Osborne, Jr., Waterville, Oneida county, Duke Charles,.......................... .... Trans. and 3

Commended.

Wm. M. Bullock, bull calf, Comet,.................... Trans.

SHORT-HORNS—*Cows, three years old.*

1. J. M. Sherwood, Auburn, Red Rose,...................... 30
2. S. P. Chapman, Clockville, Duchess,..................... 20
3. J. M. Sherwood, Auburn, Pansy,......................... 10

Two years old.

1. S. P. Chapman, Clockville, Ruby 2d,.. 20
2. J. M. Sherwood, Auburn, Nymph 2d,............... 15
3. J. M. Sherwood, Auburn, P. A. 2d,....................... 10

One year old.

1. S P. Chapman, Clockville, Hilpa 4th,............... 15
2. N. J. Becar, Smithtown, L. I.,........................... ... 10

Heifer calf.

1. J. M. Sherwood, Auburn,.......... 8
2. S. P. Chapman, Clockville, Ruby 3d,........... Trans. and 3

Commended.

J. M. Sherwood, Auburn, 3 year old cow, Amina, vol. Trans.
J. M. Sherwood, Auburn, 2 year old heifer, Pansy 5th, Trans.
N. J. Becar, Smithtown, L. I., heifer calf, Transactions.
S. Merriman, Oriskany, short-horn heifer, 2 years old, Trans.

DEVONS—*Bulls three years old.*

1. L. H. Colby, Scipio, Cayuga, Champion,................... 30
2. John Oliver, Sterling, Cayuga,.......................... 20
3. S. H. Church, Vernon Centre, Diamond,................... 10

Two years old.

1. J. H. Caswell, West Exeter, Osceola,..................... 20
2. Marcus Zeah, Fulton, Schoharie county,................... 15
3. John Muir, Sen., Madison county,........................ .. 10

One year old.

1. W. P. and C. S. Wainright, Rhinebeck, May Boy,..... 15
2. J. B. Tuckerman, Richfield, Young Major,............... 10
3. Joseph H. Eastman, Oneida county,........................ 5

Bull calf.

1. W. P. and C. S. Wainright, Rhinebeck, Keokuk,........... 8
2. S. H. Colby, Scipio, Cayuga county, Valiant,..... Trans. and 3

Cows. three years old.

1. John Freemyre, Fulton, Schoharie county,..... 30
2. W. P. and C. S. Wainright, Rhinebeck,... 20
3. John R. Chapman, Oneida Lake, ... 10

Two years old.

1. Wm. C. Remington, Sennett. Cayuga co.,... 20
2. W. P. and C. S. Wainright, Rhinebeck,......... 15
3. L. H. Colby, Scipio, Cayuga co.,.......................... 10

One year old.

1. R. H. Van Rensselaer, Morris, Otsego co., ... 15
2. W. P. and C. S. Wainright, Rhinebeck,.................... 10
3. W. P. and C. S. Wainright, Rhinebeck,.................... 5

Heifer calf.

1. R. H. Van Rensselaer, Morris, Otsego county,.... 8
2. J. M. Collins, Smyrna, Chenango co., Trans. and. 3

Commended.

Miles Vernon, Stafford, 1 cow,......... . ... Trans.
Samuel Baker, Edmeston, heifer, 2 years old,.......... Trans.
R. H. Van Rensselaer, Morris, 1 heifer,................ Trans.
John Freemyre, Fulton, 1 calf,................. ..... Trans.

HEREFORDS—*Bulls, three years old.*

2. Gen. Roswell Harmon, Wheatland,.......................... 20

Two years old.

1. Erastus Corning, Jr., Albany, Cardinal Wiseman,........... 20

One year old.

1. Wm. H. Sotham, Livingston co., Climax,.................. 15
2. L. F. Allen, Buffalo, Talma,.... 10

Bull Calf.

1. Erastus Corning, Jr., Albany,............................ 8
2. L. F. Allen, Buffalo,........................... Trans. and 3

Cows, three years old.

1. Wm. H. Sotham, Livingston co., Pretty Maid,.............. 30
2. E. Corning, Albany, Victoria 2d,........ 20
3. Wm. H. Sotham, Livingston co., Rosy,..................... 10

Two years old.

1. Wm. H. Sotham, Livingston co., Twin,........ 20
2. E. Corning, Jr., Albany, Victoria 3d,...................... 15
3. Wm. H. Sotham, Livingston co., Bloomy,................... 10

One year old.

1. Wm. H. Sotham, Livingston co., Myrtle,.................. 15
3. Wm. H. Sotham, Livingston co., Dairy Maid,... 5

Heifer Calves.

1. E. Corning, Jr., Albany, Perfection,.. 8

Commended.

George Clark, Otsego co., herd of 50 head of cattle, different ages,.................................. Silver Medal.

AYRSHIRE BULLS—*Three years old.*

EXTRA STOCK.—A bull, "Dandy," exhibited by J. C. Tiffany, Coxsackie, Greene county, with no competitor in his class, and having received the first prize at Albany in 1850, the committee awarded a *Certificate.*

Three years old.

1. E. P. Prentice, Mt. Hope, Albany co., Dundee 2d,........... $20

One year old.

1. James Brodie, Jefferson county, Killburn,.................. 15
2. E. P. Prentice, Mt. Hope, Dundee 3d,...................... 10
3. Anthony Van Bergen, Coxsackie, Greene county,........... 5

Bull Calf.

1. E. P. Prentice, Mt. Hope, Dundee 4th,..................... 8
2. J. C. Tiffany, Coxsackie, Repeal,................ Trans. and 3

Cows, three years old.

1. James Brodie, Adams, Jefferson co., Mary Gray,............ 30
2. E. P. Prentice, Mt. Hope, Albany co., Jennie,.............. 20
3. E. P. Prentice, Mt. Hope, Albany co., Red Lady,........... 10

Two years old.

1. J. C. Tiffany, Coxsackie, Red Lady,................ 20

One year old.

1. E. P. Prentice, Mt. Hope, Katy 3d,........................ 15
2. J C. Tiffany, Coxsackie, Greene co., Belle,................. 10

Heifer Calves.

1. E. P. Prentice, Mt. Hope, Albany co., Red Lady 3d,........ 8
2. E. P. Prentice, Mt. Hope, Albany co., Dolly 3d,.. Trans. and 3

GRADE—*Cows, three years old.*

1. John Brown, Auburn, Durham cross, Blossom,............. 30
2. Geo. Clark, Springfield, Durham and Hereford,............. 20
3. Geo. Clark, Springfield, same as above,.................... 10

Two years old.

1. J. C. Pool, Clinton, Oneida co., Devon and Native,.......... 20
2. Wm. R. Miller, Oneida co., Durham and Native,............ 15
3. Gains Butler, Clinton, Oneida co , Devon and Native,........ 10

One year old.

1. Craig Wadsworth, Geneseo, Livingston co ,................ 15
2. Elon Sheldon, Sennett, Durham and Native,................ 10
3. S. H. Church, Vernon, Devon and Native,................. 5

Heifer Calf.

1. Joseph H. Eastman, Marshall, Devon and Native,........... 8
2. Chas. Mason, Vernon, Devon and Native,........ Trans. and 3

Commended.

John Brown, Auburn, Durham cross,. .... Trans.

Natives—Cows.

1. Elisha Williams, New Hartford,............................ 30
2. Joseph H Eastman, Marshall,................ 20
3. Charles Downer, New Hartford, Oneida co.,................ 10

Two years old.

1. Richard M. Hunt, Kirkland,..... 20
2. E. H. Morgan, Marcy. Oneida co.,.......................... 15

Heifers.

1. Seth Miller, New Hartford,................................ 8

WORKING OXEN.

1. Best 20 yoke (county)—None awarded.
2. " S. M. Mason and others, New Hartford,............ 40
1. " 10 yoke (town) J. S. Wadsworth, Geneseo,........ 30
2. " E. Sheldon, Sennett, Cayuga co.,.... 20
1. " single yoke, N. B. Wakeman, Covert, Seneca,......... 20
2. " Geo. Clark, Springfield, Otsego,................... 15
3. " A. Ross, Preston, Chenango,.......................... [illegible]

Commended.

Horatio N. Carey, Marcy, 1 yoke spayed working heifers, ... [illegible]

THREE YEARS OLD STEERS.

1. Best 10 yoke (county) F. D. Blackstone & Co., N. Hartford,.. 2
1. " single yoke, Hiram P. Potter, East Hamilton,.......... 1
2. " E. Sheldon, Sennett, Cayuga,...................... ... 10
3. " Luther Comstock, Kirkland, Oneida,.................. [illegible]

Highly Commended.

Simon Antisdell, Middlefield, Otsego county,........... Trans.
Horatio N. Carey, Marcy, Oneida county,............. Trans.
Luther Comstock, Kirkland, Oneida county,............ Trans.
George Sheldon, Conquest, Cayuga county,.............. Trans.

TWO YEARS OLD STEERS.

1. Best 10 yoke (county)—None awarded.
2. " James H. Sherill, New Hartford,.... 1
1. " Single yoke, G. Sheldon, Cayuga county,..... 10
2. " Chas. Mason, Vernon, Oneida county,................ [illegible]
3. " John W. Williams, Whitesboro',........... Trans. and 3
1. " Boy's Training, Henry Comstock, entered by L. Comstock,......................... ... Silver Medal.

Commended.

M. Owen, West Winfield, 1 pair Dur. calves, small Silver Medal.

ONE YEAR OLD STEERS.

1. Best single yoke, Daniel M. Brown, Brookfield,............ 8
2. " Sam. H. Hammond, Brookfield, Madison co.,.......... 6
3. " Wm. Robson, Westmoreland,............. Trans. and 3
1. " Boy's training, John Robson, (under 16,) Westmoreland, Oneida co.,.......................... Silver Medal.

Commended.

George Clark, Springfield, Otsego county,......... .... Trans.

MILCH COWS.—*Commended.*

1. Seth Miller, New Hartford, Oneida co.,............... Trans.
2. Elias Thomas, Checkerville,.......................... Trans.

FAT CATTLE.—*Four years old.*

1. Craig Wadsworth, Geneseo,. 25
2. Chas. Wadsworth, Geneseo,.............................. 15

Single Ox.

1. Hiram P. Potter, East Hamilton, 4 years old,..... 12

Cow—Four years old.

1. E. Sheldon, Sennett, Cayuga co.,......................... 12
2. A. Ross, Preston, Chenango co.,......................... 8

Heifers.

1. John W Taylor, Lima, Livingston co., ... 10
2. H. H. Kellogg, Clinton, Oneida co., ... 5
3. H. N. Carey, Marcy, Oneida co., ... Trans.

Commended.

J. W. Taylor, Lima, 40 head 3 years old steers, ... Trans.

HORSES.

All Work—*Stallions, 4 years old.*

1. Daniel North, Middlefield, "Gifford Morgan," ... $30
2. Truman D. Derick, Troy, "Young Norman," ... 20
3. Mark Gill, Pittsfield, Otsego co., "Highlander," ... 10
4. J. D. Remington, Sennett, "Young Black Hawk," Youatt.

Mares and Foals.

1. Samuel Baker, Edmeston, Otsego county, ... 30
2. Horatio Curtis, Clinton, Oneida county, ... 20
3. R. S. Stacey, Pompey, Onondaga county, ... 10
4. Elias Thomas, Volney, Oswego county, ... Youatt.

Commended.

S. A. Gilbert, East Hamilton, "Young Gifford Morgan," Trans.

John Rosevelt, Northampton, "Black Hawk," ... Trans.

Eli Rudd, Ellisburgh, "Young Mountain Morgan," ... Trans.

Truman Cone, Denmark, "Black Blucher," ... Trans.

Ira Brayton, Fort Ann, "American Eagle," ... Trans.

John K. Tucker, Buffalo, "Young Defiance," ... Trans.

Draught Stallions.

1. Cornelius Scobie, Springport, "Interest," ... 30
2. Charles Peek, Van Buren, "American Messenger," thorough bred, ... 20

Commended.

The thorough bred horse "Consternation," owned by J. B. Burnet, Syracuse, having heretofore received the first premium, is awarded a certificate by the judges.

Three years old Stallions.

1. Orin H. Pownell, Ridgway, Orleans county, ... 25
2. John F. Hager, Verona, Oneida county, ... 12
3. Ira Carrier, Fulton, Oswego county, ... 5
4. Horace Wood, Deerfield, Oneida county, ... Youatt.

Mares.

1. Obadiah Howland, Owasco, Cayuga county, ... 25
2. J. M. Gillett, Clyde, Wayne county, ... 12
3. F. A. Spencer, Westmoreland, Oneida county, ... 5
4. R. A. Avery, Vernon, Oneida county, ... Youatt.

Stallions—*Two years old.*

1. M. D. Barnet, Syracuse, Tiptoe, ... 15
2. Barnes Davis, Vernon, Oneida county, ... 10
3. R. M. Remington, Sennett, Young General Gifford, Youatt.

Mares.

1. M. Leyden, jr., De Witt, Onondaga county, ... 15
2. Obadiah Howland, Owasco, Cayuga County, ... 10
3. S. A. Gilbert, East Hamilton, ... Youatt.

Commended.

1. Volkert Vrooman, Mohawk, Waxy Pope, ... Trans.
2. David W. Shaw, Gains, Orleans, Empire, ... Trans.
3. Mrs. Matilda Hibbard, Syracuse, Hornblower, ... Trans.
4. L. Tower, Oswego, Morgan Messenger, ... Trans.

Stallions—*One year old.*

1 Charles W. Ingersoll, Lodi, ... 10
2 Wm. R. Kirby, Bainbridge, ... 5
3. Calvin Shattuck, Marcy, ... Youatt

Matched Horses—*Carriage.*

1. Benjamin Ashby, Auburn, ... 20
2. Olney Gould, Albion, Orleans, ... 15
3. H. Gould, Albion, Orleans, ... 8

Special, to H. B. Moore, Rochester, pair gray horses, ... 20

Commended.

1. D. S. Forbes, Chautauque county, ... Youatt.
2. P. D. Livingston, Auburn, ... Trans.
3. E M. Parsons, Rochester, ... Trans.
4. Josiah Barber, Auburn, ... Trans.
5. S. White, jr. New-Haven, Oswego county, ... Trans.
6. Edward Dewey, Deerfield, Oneida county, ... Trans.

Draught.

1. John Bryden, Kirkland, Oneida county, ... 20
2. J. A. Holmes, Hastings, ... 15
3. Royer & Avery, Paris, Oneida co., ... 8
4. Nathaniel S. Wright, Vernon, Oneida county, ... Youatt

Ten pair Farm Horses.

1. Squire M. Mason and others, New-Hartford, ... 25

Geldings

1. M. G. Varney, Prospect, Oneida county, ... Dip. and 10
2. L. R. Proctor, Hartwick, Otsego county, ... 8
3. Wm. H. Hills, Rome, ... 6
4. Jonathan Bliss, Floyd, ... Youatt.

Commended.

Clark & Jerolman, Whitestown, Sorrel horse, ... 10

Single Mares.

1. W. V. Willoughby, Newport, ... Dip. and 10
2. H B. Moore, Brighton, Monroe, ... 8
3. Daniel W. Curtiss, Canaan, ... 6
4. J. Tanner, Schuyler, ... Youatt.

Commended.

1. M. L. Hungerford, Watertown, Jefferson county, ... Trans.
2. Horace Shepherd, New-Hartford, ... Trans.

Foreign Horses.

Blood Stallion, E. Adams, Vergennes, Vt., Black Hawk, jr., Dip. 10

All Work.

Best Stallion, Silas Hale, South Royalton, Mass., Green Mountain Morgan, ... Dip and 10

Best Draught Stallion, John C. Willson, Guelph, C. W., John Long, ... Dip. and 10

Commended.

Newell Miner, Simsbury, Conn., Morgan, ... Trans.

F. A. Wier, Walpole, N. H., Gifford Morgan, ... Trans.

JACKS AND MULES.

Jacks—P. Ward, Owego, ... 30

Mules—H. H. Kellogg, Clinton, ... 20

SHEEP.

Fat Sheep—Long Wooled—*Over two years.*

1. Hungerford & Brodie, Adams, Jefferson county, ... 6
2. Elias L. Barlow, Lagrange, ... 4

Under two years.

1. John McDonald, Warren, Herkimer county, ... 6
2. John McDonald, Warren, Herkimer county, ... 4

Middle Wooled—*Over two years.*

1. John McDonald, Warren, Herkimer county, ... 6
2. do do do do ... 4

Cross Breed—*Over two years.*

1. Richard Gypson, Westmoreland, Oneida county, ... 6

Long Wooled Buck—*Two years upward.*

1. Hungerford & Brodie, Adams, Jefferson county, ... 12
2. James A. Jackson, Gilbertsville, Otsego county, ... 10
3. Elias L. Barlow, La Grange, Dutchess county, ... 6

Buck—under two years old.

1. John A. Rathbun, Springfield, Otsego county, ... 12
2. John McDonald, Warren, Herkimer county, ... 10
3. Amos T. Wood, Ellisburgh, Jefferson county, ... 6

Five Ewes—Over two years old.

1. Hungerford & Brodie, Adams, Jefferson county, ... 12
2. Charles W. Eells, Kirkland, Oneida county, ... 10
3. Elias L. Barlow, La Grange, Dutchess county, ... 6

Ewes—Under two years old.

1. Hungerford & Brodie, Adams, Jefferson county, ... 12
2. John McDonald, Warren, Herkimer county, ... 10
3. John A. Rathbun, Springfield, Otsego county, ... 6

Buck Lambs.

1. Elias L. Barlow, La Grange, Dutchess county, ... 8
2. Jacob C. Rathbun, Springfield, Otsego co., Morrell's Shep'd & 4

Commended.

1. J. A. Jackson, Gilbertsville, Buck lambs, ... Trans
2. John McDonald, Warren, Herkimer county, ... Trans.
3. Elias L. Barlow, La Grange, yearling ewes, ... Trans.

Middle Wooled Bucks—over two years old.

1. Z. B. Wakeman, Herkimer, ... 12
2. do do ... 10
3. do do ... 6

Bucks under two years old.

1. Z. B. Wakeman, Herkimer, ... 12
2. do do ... 10

Five Ewes over two years old.

1. J. M. Sherwood, Auburn, 12, ... 12
2. Z. B. Wakeman, Herkimer, ... 10
3. C. W. Eells, Westmoreland, ... 6

Five Ewes under two years old.

1. Z. B. Wakeman, Herkimer, ... 12
2. Wm. Robson, Westmoreland, ... 10
3. Geo. K. Eells, Kirkland, ... 6

Three Buck Lambs.

1. Z. B. Wakeman, Herkimer, ... 8
2. J. M. Sherwood, Auburn, ... Morrell's Shepherd and 4

Three Ewe Lambs.

1. Z. B. Wakeman, Herkimer, ... 8
2. J. M. Sherwood, Auburn, ... Morrell's Shepherd and 4

Merinos—Bucks over two years old.

1. J. D. Patterson, Westfield, Chautauque county, ... 12
2. Sharp & Taylor, Lockport, ... 10
3. Reed Burrit, Burdet, Tompkins county, ... 6

Under two years old.

1. Sharp & Taylor, Lockport, ... 12
2. Arza Gage, De Ruyter, Madison county, ... 10
3. Joseph Haswell, Hoosick, Rens. co., ... 6

Five Ewes over two years old.

1. J. D. Patterson, Westfield, Chautauque county, ... 12
2. Sharp & Taylor, Lockport, ... 10
3. R. E. Keese, Keeseville, Clinton county, ... 6

Fives Ewes under two years old.

1 J. W. Haswell, Hoosick, Rens., county, ... 12
2. R. E. Keese, Keeseville, ... 10

Three Buck Lambs.

1. Joseph Haswell, Hoosick, ... 8
2. R. E. Keese, Keeseville, ... Morrell and 4

Three Ewe Lambs.

1. R. E. Keese, Keeseville, ... 8
2. Arza Gage, De Ruyter, ... Morrell and 4

WOOL.

1. Fleeces. (none awarded.)
2. N. M. Dart, Harpersfield, Delaware county, ... 3

Saxony—*Bucks, two years old and over.*

1. Silas B. Crocker, Vernon, ... 12
3. S. H. Church, Vernon, ... 10
3. S. B. Crocker, Vernon, ... 6

Bucks under two years old.

1. S. H. Church, Vernon, ... 12
2. S. B. Crocker, Vernon, ... 10
3. S. H. Church, Vernon, ... 6

Five Ewes over two years.

1. S. B. Crocker, Vernon, ... 12
2. S. H. Church, Vernon, ... 10
3. Joseph Haswell, Hoosick, ... 6

Five Ewes under two years.

1. S. H. Church Vernon, ... 12
2 S. B. Crocker, Vernon, ... 10

GRADE SHEEP—*Bucks over two years.*	
1. D. S. Curtis, Canaan,	$12
2. D. W. Curtis, Canaan,	10
Bucks under two years.	
1. D. W. Curtis, Canaan,	12
2. D. S. Curtis, Canaan,	10
Five Ewes over two years.	
1. Joseph Haswell, Hoosick,	12
2. D. S. Curtis, Canaan,	10
3. D. W. Curtis, Canaan,	6
Five Ewes under two years.	
1. D. S. Curtis, Canaan,	12
2. D. W. Curtis, Canaan,	10
Three Buck Lambs.	
1. D. S. Curtis, Canaan,	8
2. D. W. Curtis, Canaan, Morrell's Shepherd and	4
Three Ewe Lambs.	
1. Joseph Haswell, Hoosick,	8
2. D. S. Curtis, Canaan, Morrell's Shepherd and	4
FOREIGN SHEEP—LONG WOOLED—*Bucks.*	
George Miller, Markham, C. W.,	10
Five Ewes.	
Wm. Miller, Pickering, C. W.,	10
MIDDLE WOOLED—*Buck.*	
Ralph Wade, jr., Coburgh, C. W.,	10
Five Ewes.	
Ralph Wade, jr., Coburgh, C. W.,	10
Three Buck Lambs—Long Wooled.	
George Miller, Markham, C. W.,	5
MERINOS—*French Buck.*	
Daniel Kimball, Clarendon, Vt.,	10
Five French Ewes.	
O. F. Holiburd, & D. Kimball, Shelburne, Vt.,	10
SWINE.	
LARGE BREED—*Boar over two years old.*	
Isaac W. Curry, South Trenton,	10
Boar one year.	
Z. B. Wakeman, Herkimer,	10
Boar six months.	
1. Otis Simmons, Madison,	8
2. Morris Hicock, New-Hartford,	4
Sows, two years old and over.	
1. Isaac W. Curry, South Trenton,	10
2. Geo. K. Eells, Clinton,	5
Sow one year.	
John Jeffers, Kirkland,	10
SWINE—SMALL BREED—*Boar, one year old.*	
Almond Barnard, Marshall,	10
Boar six months.	
Henry Dodge, Trenton,	8
Sows, Two years old.	
1. L. T. Marshall, Vernon,	10
2. Z. B. Wakeman, Hermiker,	5
Sows one year.	
1. A. L. Fish, Litchfield, N. Y.,	10
2. Elisha Williams, New-Hartford,	5
Sow six months.	
Henry Dodge, Trenton,	8
Lot Pigs.	
A. L. Fish, Litchfield, N. Y.,	10
Commended.	
James Plant, Utica, lot of four fine pigs,	5
FARM IMPLEMENTS TRIED AT GENEVA, JULY, 1852.	
Grain Reapers.	
1. T. Burrall, Geneva, Burrall's Reaper, Dip. and	50
2. J. H. Manny, Wadham's Grove, Illinois, Manny's convertible reaper for grain or grass,	30
3. Seymour & Morgan, Brockport.	20
Mowing Machines.	
1. J. H. Manny, Wadham's Grove, Ill., Dip. and	50
2. Howard & Co., Buff., Ketchum's Mowing Machine,	30
Grain Drills.	
1. P. Seymour, East Bloomfield, N. Y., Dip. and	25
2. Bickford and Huffman, Macedon, N. Y.,	15
3. S. R. Tracy, Newark, N. Y.,	10
Horse power on the lever principle.	
1. J. A. Pitts, Buffalo, Dip. and	25
2. Eddy, Dyer & Co., Union Village, Washington co., N. Y.,	15
Horse power, endless chain principle.	
1. Emery & Co., Albany, Dip. and	25
2. E. W. Badger, Fly Creek, N. Y.,	15
Iron Horse Power.	
1. B. H. Wakely, McLean, Tompkins county, Dip. and	25
2. Eddy, Dyer & Co., Union Village, N. Y.,	15
3. J. A. Pitts, Buffalo,	10
Thrashing Machines with cleaning apparatus.	
1. J. A. Pitts, Buffalo, Dip. and	10
2. Hall & Thompson, Rochester,	8
Thrashing Machines without cleaning apparatus.	
Eddy, Dyer & Co., Union Village, N. Y.,	10
Seed Planters.	
Joshua Woodward, Haverhill, N. H., Dip. and	10
Cultivator, general purposes.	
1. S. R. Tracy, Newark, Wayne county, Dip. and	10
2. Henry Howe, Canandaigua	8
Broadcast Sower.	
Pierpont Seymour, East Bloomfield, Dip. and	10
Portable Saw Mill.	
1. E. W. Badger, Fly Creek, N. Y.,	10
2. Emery & Co., Albany,	8
3. E. W. Badger, Fly Creek,	5
Corn Sheller—hand power.	
1. Rapalje & Co., Rochester,	6
2. Zenas Wright, Utica,	4
Vegetable Cutter.	
J. Rapalje & Co., Rochester,	6
Portable Grist Mill.	
1. Edward Harrison, New-Haven, Ct.,	10
2. Hart & Munson, Utica,	5
Farm Scraper.	
Zenas Wright, Utica,	5
Dog Power Churning Machine.	
A. H. Randall, Verona, N. Y,	5
Pump.	
1. Hinman, Higley, & Co., Utica,	5
2. Rapelje & Co., Rochester,	3
Horse Hoe.	
Pierpoint Seymour, East Bloomfield,	20
AGRICULTURAL IMPLEMENTS—*Most numerous and best collection.*	
1. Rapelje & Co., Rochester,	25
2. Thomas Foster, Utica,	15
Agricultural Implements made in the State.	
J. Rapalje & Co., Rochester,	25
Commended.	
Portable Cider Mill, W. R. Lamphaer, Lancaster, Pa.,	Trans.
do do D. F. Phelps, Ashland, co., Ohio,	Trans.
Flour Packer and improved Mill Spindle, John T. Noye, Buffalo, Dip. and	3
MACHINERY.	
Drain Tile and Chimney Top.	
J. W. Gregory, Clinton, Oneida county,	5
Commended.	
Portable Hydraulic Press, P. C. Curtis, Utica,	small Sil. Medal.
Iron Curb for Chain Pump, Downs & Co., Sen. Falls,	Diploma.
Pumps and Garden Engine, Downs & Co., Sen. Falls,	s. S. Medal.
Model of Vertical Hay Press, S. Dederick, Albany,	do
Machine for crushing, grinding, and pulverizing, E. & J. Bussing, N. Y.,	Dip.
Steam Engine, D. A. Woodbury & Co., Rochester,	Sil. Medal.
Iron Farm Fence, M. P. Coons, Troy,	10
Patten's Leather Splitting Machine, A. K. Northrop, Deansville,	Dip.

Corn Fodder.

In the course of the last six or eight years, much has been said and written upon sowing corn for fodder. Few farmers have practiced this method of securing feed, but in a dry season like the present, many would do well to avail themselves of it. Every farmer who keeps any great number of cattle, should sow a little for feeding out in "dog-days," as green food for milch cows, or to other stock when necessary.

The plan usually adopted is to sow broadcast, and when of sufficient growth to mow, and cure for winter feed, as we do hay, or to feed green in the yard or field. When sown broadcast I think it should be fed green; for when made into dry fodder, the chances are that the crop will be weather beaten and spoiled before it can be sufficiently cured for storing in the barn. A sudden shower, or long rain, will almost invariably ruin the fodder. Corn stalks require a great deal of curing before they become dry enough to keep as well as hay. Should they be carried into the barn with a little moisture on them, and stowed away compactly, they will be almost sure to heat and spoil. And if kept in the sun long enough to cure perfectly, the leaves become dry and crumble, before the stalk is sufficiently cured. When the crop is intended for winter fodder, a better plan is to prepare the ground properly, and sow the corn in drills with a seed sower, some twenty inches or two feet apart. The weeds may be kept down by passing a horse cultivator two or three times between the rows. In harvesting this crop, the same course may be pursued as in securing the corn crop in the fall—cut up at the bottom with a corn knife, and stack it, by gathering the stalks around a bunch of standing corn till the stook is of good size, then turn down the tops and confine with a band of straw, and the work is done. The stooks may stand till the fodder is well cured, which will take from six weeks to two months, as the case may be, and if the stooks are well put up, there will be no danger of the fodder being injured by the weather.

When sown broadcast, the corn should be thickly scattered, so as to prevent the weeds from growing. The best time for cutting the corn for green feed, is after the stalk has attained its full growth, or when the ear is beginning to form. However, those who have more experience, may know better about the time of cutting. Let every farmer make a trial of half an acre of corn fodder, and after one experiment they will continue to raise it. L. Durand. *Derby, Ct., July* 28, 1852.

Advantages of a Change of Seed.

A recent number of the North British Agriculturist contains an article on this subject, from which we gather the following statements. Experience has proved that a change from an inferior to a richer district, is seldom beneficial, but that a change from a warmer to a colder district, is always followed by a beneficial result, in somewhat shortening the period of growth, an increase of weight, appearance of sample, and very generally in the produce, the difference in straw being equally observable. It has also been found that now and improved varieties of grain in a few years generally lose their distinctive characters. This has been imputed to a falling off of the vitality of the new, and consequently hybrid plant, showing the necessity of systematically selecting and propagating agricultural seeds of all kinds. A change of seed wheat from one district to another, has frequently resulted in an increase of produce of about two bolls, (twelve bushels,) an acre. On a farm possessing a variety of soil, the change of seeds from one part to the other, has always been beneficial. The introduction of seed wheat from a region where this crop is not affected by the smut, is said to prevent this disease, even better than any preparation of the seed. The more recently the grain has been removed from the straw the better, as it is liable to become musty when lying in store.

The same deterioration in quantity and quality is noticable in seed oats, when the same seed is continued. The following advice of the Editor, will be equally applicable to farmers in this country.

"We hope gentlemen will continue to direct their attention to the subject of change of seed, and that they will favor the public with the results of their experience. As agriculture is emerging from the rule of thumb practice, it will prove highly advantageous for its speedy advancement, that experiments on this, as well as other subjects, be only undertaken with care, and upon correct principles; that not only the land, with produce, be measured, but also every care exercised in noticing the varieties of the grain, the nature of the soil on which it is grown, the climate, as regards elevation, moisture, &c., the period of sowing, coming into ear, and when ready for cutting, with the result of the after produce. Nothing should be regarded as unimportant in conducting agricultural experiments. We would suggest the importance of undertaking experiments, not only with grain, the growth of a different climate, but that that these experiments should embrace the question of steeping the seeds in liquids containing a solution of different substances, such as dissolved nitrate of soda. potash, sulphate of ammonia, &c., and also how far the plan of coating the seed with such a substance as guano, for instance, affects the future produce. We make these suggestions with the greater confidence, as we have experimentally found that the produce was sensibly increased of wheat, oats, and barley, by steeping in such solutions, and that steeping the two latter grains checked, if not wholly prevented, black heads."

Crab Grass.

Luther Tucker, Esq.—The above named grass is superior to all others in the southern U. States, for the production of hay; and not inferior in quality to northern hay.

Not having noticed a description of it in print, I send you a brief one, and trust you will conclude it is not only a valuable, but a remarkable grass—and, in order for a better understanding of its merits, I will give you a description of a southern meadow in Louisiana, on the banks of the Mississippi River.

The ground is plowed usually in January or February, every season, and sowed in oats, and harvested in May or June; (no grass seed is ever sown.)

The Crab grass makes its appearance early in the spring, and by the time the oats are harvested, the grass is a few inches high; and if the season is favorable, it will produce from one to two tons of hay per acre, in September, seed enough having fallen from this to stock the same.

I have harvested a crop of oats, and cut a full crop of grass from the same land, every year, for many years in succession, without any apparent diminution in quantity.

The grass grows from one to three feet in length, inclined to run, resembling English grass, or red top. It has never failed of a crop. It generally dies out in the winter, and comes up from the seed in the spring. It is fine for pastures. S. Tillotson. *Canton, Conn., July* 15.

[For the Cultivator.

The Plow.

I sing the plow, the good old plow,
Which since its race began,
True riches to the world has brought—
True dignity to man.

And though its share may show the soil,
From mountain side or plain,
It is a wholesome, honest soil,
The soil that leaves no stain.

Unlike *that* soil which guilt imparts,
When from the narrow way
Which truth and honor have marked out,
Man dares to go astray.

The yielding earth its furrows takes
As seas the vessel's prow,
But not a furrow does it plant,
Or wrinkle on the brow.

Though forged to break the stubborn glebe,
And act the hostile part,
It only asks the harden'd hand,
And not the harden'd heart.

No widow's tears or orphan's wail
Upon the breeze are borne,
But peace and plenty, health, and joy
Its victories adorn.

It fathoms not the darksome mine,
The grains of gold to gain,
But hopefully turns up the soil
Which yields the golden grain.

God speed the Plow! for carking care,
Nor penury's chill blight,
Shall follow him who follows thee,
And keeps thy plowshare bright. C. F. L. F.

Milwaukie, Wisconsin.

Your character cannot be essentially injured, except by your own acts.

Keep your own secrets if you have any.

Horticultural Department.

Pomological Meetings at Utica.

Interesting pomological meetings, consisting of a few of the most intelligent cultivators in attendance at the New-York State Fair, was held on the evenings of the 7th and 8th of 9 mo., (Sept.)

First Evening.

The *Winter Nelis Pear* being called up for discussion, P. Barry, of Rochester, stated that it was of weak and crooked growth, would not grow on the quince; but he admitted it was a pear of high flavor. This opinion was corroborated by Wm. Reid, of Elizabethtown, N. J., who spoke of the scarcity of this tree in nurseries, as proving the difficulty of its culture. C. M. Hovey, of Boston, regarded it a vigorous grower, although slender, and said it was one of the twelve regarded as best at Boston. F. R. Elliott, of Cleveland, considered it as a handsome, fair, and good fruit. W. R. Coppock, of Buffalo, had known the fruit as good as the Seckel, and had found the growth thrifty, though slender. J. Morse, of Cayuga Bridge, stated that after having grown it for many years, he found it never blighted, and he regarded it as only excelled in value by the White and Gray Doyenne. Wm. Reid stated that it dropped its leaves badly, as well as Flemish Beauty and others. T. C. Maxwell, of Geneva, and J. Morse of Cayuga, both stated that Flemish Beauty held its leaves well, in spite of the drouth.

Vicar of Winkfield.—C. M. Hovey, while he regarded the Winter Nelis as best to eat, found the Winkfield best to *sell*—and although not of high quality, was very productive and showy—the tree was beautiful and ornamental—he had known the Winkfield to sell for 75 cents per dozen, and the Glout Morceau for three dollars per dozen. P. Barry would plant the Winkfield in a selection of a dozen sorts, and valued it highly—the Glout Morceau had disappointed some cultivators in Western New-York—it was not the best grower, and did not always mature well. Wm. Reid and others thought it a good grower.

The *third best winter pear* was asked for, and the Vicar of Winkfield was agreed to stand next to Winter Nelis and Glout Morceau.

C. M. Hovey stated that several Flemish pears were apt to have small and worthless fruit among them, among which he named Spoelberg, Wurtemberg, Marie Louise and Passe Colmar—he knew of no American pears liable to this defect. P. Barry cited the Stevens' Genesee, and Dearborn's Seedling, as being similarly defective.

M. Kelly, of Cincinnati, had not found the American pears hardier than the European—in a locality where the tree is strongly liable to injury.

C. M. Hovey found but few American pears tender, and but few that did well on quince stocks—indeed, very few of any origin did well on quince—but he did not know the same proportion of American as of European for this mode of culture.

C. M. Hovey stated that Dearborn's Seedling failed on the quince after a few years—that he should dig up his trees, as they had become an eye sore. T. C. Maxwell had large trees of the Dearborn's Seedling, which did well on quince. Wm. Reid knew trees of the Andrews ten feet high, which grew and did well. These are both American seedlings.

P. Barry thought more experience was needed on this subject—the stocks at first used here were not of good quality—and he thought if the trees were placed in good soil, properly manured, pruned, and not allowed to overbear, that many would succeed well, which would otherwise fail.

The *best early pear* being called for, C. M. Hovey and P. Barry named the Doyenne d'ete—Wm. Reid recommended the Madeleine as earlier—but it was not found so at Boston and Rochester, where the Madeleine was regarded as second best.

The *two best market cherries* being asked for, early and late, most agreed in recommending the Early Purple Guigne and Downer. P. Parry named the Early Purple Guigne and Belle Magnifique. Wm. Reid named the Mayduke as early. The Sweet Montmorency was regarded by C. M. Hovey as a good late sweet cherry. P. Barry thought it would not sell, when C. M. Hovey stated that he had known it to sell for fifty cents per quart.

Second Evening.

The *superior hardiness of seedling peaches* over budded ones, was proposed as a subject for discussion.

W. Tracy stated that peaches could not be raised at Utica except within the city, the warm and moist valley of the Mohawk preventing a sufficient ripening of the wood; while at Clinton, on higher and more exposed ground, crops were frequently obtained. He stated that two trees within the city, fine seedlings, which were well shaded at the roots from the influence of the sun, bore abundant crops.

C. M. Hovey considered the protection afforded them, as a reason for their successful bearing, without regarding the circumstance of their not being worked. A friend in Kentucky had sent him buds of one of his finest peaches, a fruit which often grew twelve inches in circumference—the buds grew, but the growth was so poor, and they gummed so badly, as to be perfectly worthless. He had generally found seedlings more tender than budded varieties, being often killed at the ends of the branches, while most budded sorts escape even to the very tips.

Dr. Warder of Cincinnati, in explanation of the reason that peach trees were killed the past winter in Kentucky, stated that the thermometer the past winter, in the same region, had fallen to 22° below zero. F. R. Elliott said it had fallen to 19° below at Cleveland, a part of the crop escaping.

J. J. Thomas stated that the thermometer at Macedon, in Western New-York, had sunk during the past winter to 13° below zero, which had not before occurred for many years—that about one-half the peach buds on his grounds had been destroyed, which was a smaller proportion than in other winters when the cold was several degrees less severe. This result he ascribed to the *uniformly* cold weather, without the influence of warm periods in starting the buds, and to the fact that after the severest cold, the sun was obscured by a curtain of clouds. He had observed that buds were often destroyed on the sunny side of branches, while those which were thawed gradually on the shaded side has escaped.

H. E. Hooker, of Rochester, had known peaches at Montreal, where the thermometer not unfrequently falls to 20° or more below zero, saved by the simple protection of a mat [which could not have increased the warmth of the air, but only prevented radiation, and excluded the sun's rays.] He remarked that budded trees consisted of nothing but *selected seedlings*, and that he had usually found them to endure the cold best.

C. M. Hovey thought budded trees the hardiest, because they usually consisted of such varieties as were of strongest growth.

P. Barry had known native seedlings, standing for many years in grass, loaded with heavy crops, when, had they been cultivated, they might have been barren. This, C. M. Hovey ascribed to the well ripened, and not succulent growth which they acquired. He considered some varieties as hardy and others as tender, entirely independent of the influence of budding.

A list of those sorts which were hardiest, and which bore most uniformly and abundantly after severe winters, being called for, C. M. Hovey named the following:—Yellow Rareripe, Cooledge's Favorite, Bellegarde and Oldmixon Free. Several gentlemen from western New-York named the Early Barnard, or Alberge, of that region, as being eminently hardy and uniformly productive. John Morse, of Cayuga Bridge, had found Jacques' Rareripe to be the hardiest and best peach for market out of some forty sorts, and Early Barnard next. J. J. Thomas named Fay's Early Ann, which he had fruited for eight years, as one of the most uniformly productive of early peaches; in two different years, when the Tillotson and Serrate Early York had nearly failed, this had borne good crops. The present very unproductive season, the White Imperial has also borne fully.

A list of such pears as had grown well on quince stocks, and had borne good crops for several years without exhausting the tree, was next called for, and the following proposed, without objection:—

Louise Bonne of Jersey, Vicar of Winkfield, Glout Morceau, Beurre Diel, Angouleme, White and Gray Doyenne, Napoleon, Beurre d' Amalis, Easter Beurre, Soldat Laboreur, Long Green of Autumn, and Striped Long Green of Autumn, Henry IV, Summer Frankreal, Bergamotte Cadette, Madeleine, Beurre d' Anjou, Urbaniste, and Doyenne Boussock.

The Results of Manure on a Pear Tree.

In a late number of Moore's New-Yorker, Linus Cone, of Oakland co., Michigan, informs us of an interesting experiment with high manuring. Twenty-five years ago he planted a Summer Bonchretien Pear tree, the culture of which, after a few years, was neglected. The fruit at first was fine, specimens often weighing nearly a pound each, but afterwards grew gradually smaller, till nearly worthless. The tree was then well pruned, washed with lye, the ground well spaded, with no improvement. Last spring, twenty bushels of manure from a blacksmith-shop, consisting of dung, parings of hoofs, cinders, &c., was spread and dug in. Twenty bushels of fine, high-flavored fruit, was the result, the same season.

Dwarf Pears for Marketing.

A correspondent inquires if it would be profitable to set out a thousand dwarf pear trees, with a view to marketing purposes. The answer must be—If such sorts are selected as have been found durable on the quince; and if good and enriching cultivation is given them—they would probably prove quite profitable. They should be trained as *half standards*, that is, with *heads* on bare trunks about two feet high. This will prevent the danger of the lower limbs being split off by deep snow, and the only pruning they will require will be a thinning of useless shoots once a year, and preserving a neat ovate shape to the heads

It must not be forgotten that the roots of the quince, being smaller and in a more compact circle than those of the pear, need a better supply of the elements of fertility, if the tree is expected to receive its due amount of nourishment. Hence, constant and enriching cultivation must be given.

Among those sorts which have proved durable upon the quince, are Louise Bonne de Jersey, Stevens' Genesee, Angouleme, Glout Moreeau, Passe Colmar, Easter Beurre, Beurre d'Amalis, Diel, Doyenne Boussock, &c. Many other varieties will grow freely on quince for a few years, but the first good crop of fruit, (even on double worked trees,) exhausts the trees, and they soon languish and die.

There is one great drawback on the profits to be expected from an orchard of dwarfs, or of any other pears; this is the danger of loss from *fire-blight*, which to some cultivators, has resulted in as heavy loss as would have been the destruction of their dwellings by fire. Cultivators of the pear should form themselves into a mutual insurance company, for security against this loss.

The inquiry whether dwarf apple trees can be made to afford profitable crops for market, cannot by any means, be answered so favorably. A tree ten years old will not yield perhaps a tenth part of the crop from an equally well treated standard. We have indeed known a distinguished cultivator to give the opinion, (we shall not say it is strictly correct,) that taking all circumstances into consideration, the average cost of apples from dwarf trees, as now cultivated, is about *five dollars per bushel.* They can be regarded only as curiosities—fancy articles of which they afford sometimes very interesting speci mens.

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English Strawberries.—A writer in the *Gardeners' Chronicle* gives his views in relation to some new and highly lauded strawberries. The *British Queen*, which has long since established its own reputation as the head of the list, he regards as the best sort in cultivation, being equal to any in size, superior to all large kinds in flavor, productive "*if liberally treated*," and the fruit of which every body must take *two bites.* The *Black Prince* he has rejected; the Goliath, "acid, insipid, coarse, very large, shy bearer;" the *Bicton White*, "only valuable for its color." *Myatt's Eleanor* is pronounced disagreeably acid for the dessert, and only useful on account of its lateness; Myatt's Globe, good and useful but not equal to Eliza and British Queen; Myatt's Mammoth, only for display, "magnificent in appearance, but horrible in flavor." Prince Arthur, "useful—as hard as a cricket ball, and will bear packing well."

New Fruits Tested at Boston.

Every cultivator knows the importance of selecting the best sorts, and this selection is greatly facilitated by knowing the experience of others. With this view, we give a list of those which were more particularly commended by the committee of the Massachusetts Horticultural Society, in their report the past winter, with the remarks of the committee:—

Strawberries—New Pine, and Burr's New Pine, of high flavor and very fine. Early Virginia, Hovey's Seedling, and Jenny's Seedling, the most profitable and best for general cultivation near Boston.

Cherries—Monstreuse de Mezel, resembling Black Tartarian.

Melon—Christiana—"not yet equalled," raised by Capt. Lovett, from a green Malta, impregnated by a very early variety—and for which the Society awarded fifty dollars.

Blackberry—cultivated High Bush—well worthy of cultivation—remarkable for size and beauty.

Raspberries—Knevett's Giant, Franconia, and perhaps Fastolff—worthy of a place in every garden.

The Northern Spy apple has again borne, but "the Committee see no reason to alter the opinion they have before expressed, of the unsuitableness of this variety for general cultivation in this vicinity." Caution against hasty decisions is, however, shown by the fact stated by the committee, "that what is now beginning to be regarded as one of our best winter pears, the Glout Morceau, was but a few years since almost condemned as nearly worthless."

Pomological Congress at Philadelphia.

The fourth Pomolgical Congress, which assembled at Philadelphia on the 13th, and continued in session two days, was in several particulars a most interesting session. Its most important movement was the adoption of a constitution, under the title of the American Pomological Society. Delegates were in attendance from nearly all the Atlantic states, and from several of the Western, and they comprised, evidently, the chief pomological talent and experience of the country. The collections of fruits were very extensive—as a proof we may state, that in a hasty glance among the tables of pears, we observed 200 varieties from M. P. Wilder, 135 from Parsons & Co., 128 from B. V. French, 122 from J. S. Cabot, 140 from Ellwanger & Barry, 100 or more from Wm. Reid, 108 from Thomas Hancock, besides many other collections nearly as large. These included some specimens of much interest, and others of extraordinary beauty and fine growth. On the whole, the Congress was a very satisfactory one, with the exception of too short a time, (only two days,) allowed for its deliberations.

The provisions of the constitution were, biennial meetings—a president, and vice-presidents from each state, territory, or province represented—a treasurer and three secretaries—executive committe of five members—a standing fruit committee of five members in each state or territory, with a general chairman—a standing committee for native fruits, another for foreign fruits, and a third on synonyms, each consisting of seven members, and an admission for membership of two dollars biennially, or twenty dollars for life-membership.

A chairman was appointed for each state, with power to select his associates, consisting of the following gentlemen, with Samuel Walker, of Massachusetts, as chairman of the whole:

Maine—Henry Little, Bangor.
New-Hampshire—Henry F. French, Exeter.
Vermont—C. Goodrich, Burlington.
Massachusetts—E. Wight, Boston.
Rhode Island—Stephen H. Smith, Providence.
Connecticut—George Gabriel, New-Haven.
New-York—P. Barry, Rochester.
New-Jersey—Wm. Reid, Elizabethtown.
Pennsylvania—Thomas P. James, Philadelphia.
Delaware—Dr. Lewis P. Bush, Wilmington.
Maryland—Samuel Feast, Baltimore.
District of Columbia—Joshua Pierce, Washington.
Virgina—Yardley Taylor, Purcell Store, Loudon co.,
South Carolina—William Summer, Pomaria.
Georgia—Stephen Elliott, Jr., Savannah.
Florida—A. G. Sems, Quincy, Gadsden co.
Alabama—Charles A. Peabody, Gerard.
Mississippi—Thomas Affleck, Washington.
Missouri—Thomas Allen, St. Louis.
Ohio—R. Buchannan, Cincinnatti.
Indiana—J. D. G. Nelson, Fort Wayne.
Illinois—Dr. J. A. Kennicott, Northfield.
Kentucky—E. D. Hobbs, Louisville.
Iowa—James Grant, Davenport.
California—Capt. F. W. Macondray, St. Francisco.

The standing committee on Foreign Fruits are, C. M. Hovey, of Mass.; J. P. Kirtland, Ohio; Charles Downing, of New-York; Robert Buist, of Pa.; P. Barry, of New-York; S. L. Goodale, of Maine, and B. Lines, of Ct.

On Native Fruits—Dr. W. D. Brinkle, Pa.; F. R. Elliott, Ohio; E. Tatnell, Jr., Del.; Thomas Hancock, N. J.; Benjamin Hodge, N. Y., and H. P. Byram, of Kentucky.

On Synonyms—J. S. Cabot, Mass.; J. J. Thomas, N. Y.; A. H. Ernst, Ohio; J. A. Kennicott, Ill.; S. D. Pardee, Ct.; A. Saul, N. Y., and J. D. Fulton, Pa.

The discussions in relation to extending or altering the list of recommended fruits, were attended with much interest, and drew out much valuable information. We can, at present, present only a very brief abstract.

S. Walker, of Boston, proposed to strike *Dearborn's Seedling* from the former lists, asserting that it was too small for market,—very small unless on vigorous stocks,—and a poor grower. S. B. Parsons had found it the best pear of its season on Long Island. J. H. Hays regarded it one of the most profitable of pears—that if stricken from the list, it would not be stricken from market—thought it variable with locality, but very valuable. B. V. French, of Mass., thought it an inferior pear—the trees he could not make grow. G. B. Deacon, of New Jersey, thought it a very good pear, worthy of cultivation. S. Walker admitted the excellent quality of the fruit, but on account of its small size, and the poor growth of the tree, regarded it as of little value on the whole. S. B. Parsons said the same reason would condemn the Seckel. A. H. Ernst stated that the Seckel grew well at Cincinnati, but from its small size would not sell; it rotted on his hands, while large and poor pears commanded a good price. P. Barry of Rochester, considered the Dearborn's Seedling as one of the most valuable in western New-York. C. M. Hovey said it was regarded as the best summer pear when adopted, and has continued to sustain its character when well cultivated and thinned. F. L. Olmsted stated that Rivers had found it to grow well on pear and fail on quince. This was corroborated by S. B. Parsons—who asked S. Walker if his trees were not on quince stocks,—who stated that they grew nearly as badly as they could on quince, and would generally die out in about two years. The motion to strike off this pear was withdrawn.

The *Washington pear* was added to the list, for general cultivation, without any objection.

The *Duchesse d'Orleans* was next proposed, and among many remarks, M. P. Wilder stated he had found it a poor grower on quince, and good on the pear—had not, with Robert Manning, found it a great bearer, but could bear witness to its fine appearance and quality. It was concluded to let it remain on the list for trial.

The *Doyenne d' Ete* being called up, A. H. Ernst stated that he had fruited it seven years, and pronounced it handsome and valuable. Hovey, Barry, Wilder, and others, corroborated this opinion, some of whom thought it grew best on pear stocks. S. Walker thought well of this pear, but did not find it to come up to the high character represented. C. M. Hovey called on him to name a better, when he named the Madeleine, which he regarded as superior. P. Barry found it to ripen before the Madeleine, and regarded it as decidedly the best—found it a "splendid grower" on quince. When allowed to ripen on the tree, it was worth little, being dry and mealy, but was fine and juicy if house ripened. B. F. Nourse found it fine in Maine, and a good grower.

The Beurre d' Anjou was proposed, and M. P. Wilder thought there would be a unanimous expression in its favor—and stated that it was the best new pear he had fruited in ten years, and that it had kept till January and February. T. Hancock had found it a most valuable pear,—the crop evenly distributed through the tree. S. Walker found it to bear well and evenly—the fruit of fair size fine shape, and very delicious—and would undoubtedly be held at the highest price in market. It was unanimously adopted for general cultivation.

Manning's Elizabeth was proposed—C. M. Hovey regarded it as one of the most delicious of August pears, the only objection being its small size. F. R. Elliott had found it a tardy bearer. C. M. Hovey had also. T. Hancock had fruited it when four feet high and two years old. B. Hodge had also fruited it, early, but found it not equal to Bloodgood or Rosticzer. It remains on the list for trial.

Brande's St. Germain was proposed—J. C. Cabot said it was a fine pear, but is not worthy of general cultivation,—it is small, a poor grower, and liable to crack. It remains on the trial list.

The *Pratt* was similarly disposed of.

The *Ott* was taken up. Dr. Brinckle considered it the best summer pear known, having the flavor of the Seckel and a month earlier. F. R. Elliott found it excellent in Ohio, but doubted if experience was sufficient to place it on the general list. There were 17 votes in favor of placing it there, and 15 opposed. So it remained in its former position.

Ananas d' Ete, *Fontenay Jalousie*, and *Van Assene* were taken up, but did not pass beyond the list of those that promises well. F. L. Omstead, T. Hancock, and others, stated that the Fontenay Jalousie cracks with them; C. M. Hovey and A. H. Ernst said that Van Assene prove very fine with them, while J. S. Cabot and others found otherwise; and with T. Hancock it cracked very badly.

Doyenne Boussock—J. S. Cabot had fruited it for some years, and thought it lacks flavor, but is so large and handsome that he regarded it valuable. Many others corroborated this opinion, and it was placed on the list for general cultivation, but not unanimously.

The *Lawrence* pear was placed on the list of those which promise well, for trial.

The *Kirtland pear*, which several had found to grow well on the quince, was also placed on this list.

There were 19 votes against the *Duchess of Angouleme*, and 10 for it, for general cultivation.

There were 17 votes for the *Beurre Giffard*, as promising well.

The Compte de Lamy, although a fine pear, was not added, on account of its small size.

The Autumn Paradise was very generally and highly commended, and adopted for general cultivation.

The Duchess of Beri and *St. Michael Archange*, by 5 votes; the *Diller pear* by 7 votes, and the *Limon*, or *Beurre Haggerston*, by 4 votes,—were placed on the list for trial, as promising well.

The *Early Richmond* cherry, was placed by 11 votes on the list for general cultivation for culinary purposes.

The *Bigarreau Gaubaulis*, *Reine Hortense*, and *Early Purple Guigne*, were placed on the list for trial. S. Walker stated that the Gaubaulis was of remarkably crooked growth in the nursery.

The *Imperial Ottoman* plum, *Hudson Gage*, *Coe's Late Red*, *Blue Imperatria*, and *Reine Claude de Bavay*, were also placed on the list for trial.

Apples—The *Smokehouse* appeared to have been much cultivated in Pennsylvania, and was highly commended. It was recommended for trial. The same disposition was made of the *Melon*, *Hawley* and *Autumn Bough*.

Red Canada or *Old Nonsuch*. A general expression in its favor, although S. Walker found it to overbear, and produce some very small fruit—others had found it spotted—14 votes placed it on the list for special localities.

Northern Spy—D. Miller, of Pa., had fruited it, and found it very knurly—S. Walker stated it was poor at Danvers, yet he said the first specimens he had received from Western New-York, were as good as any apples he ever tasted. S. Goodale said that in Maine some were very good, and others very poor. It was generally admitted as of high excellence, as grown in Western New-York. J. H. Watts said it generally sold at Rochester for $2.50 per barrel, and some the last spring, had sold in New-York city for $9.00. It was placed on the list for special localities by 22 votes.

The committee on Native Fruits reported the following as "*best*," among the new sorts present: *Jeffries* apple and *Richards*; *Susquehannah* peach; and *Moyamensing*, *Styre*, *Edwards' Elizabeth*, and *Quinnipiac* pears.

Strawberries.—*Jenny's Seedling* received 7 votes for placing it on the list for general cultivation; and *Burr's New Pine*, 15 votes. Willey did not receive the two-third vote, and did not go on this list.

The Congress adjourned to meet in two years at Boston. During its session appropriate resolutions were introduced and adopted, expressive of its loss by the death of A. J. Downing, and a Eulogy on his character, delivered on the evening of the 13th, by Marshall P. Wilder, which was eminently characterized with the ability, chasteness, and pathos, which this distinguished gentleman has at his command

Chester County Barn.

Eds. Cultivator—In answer to the query of a correspondent of St. Albans, in the last number, I propose to submit for his consideration, a plan on the model of a recently constructed *Chester* county double floored barn, and which, after an examination of various other prevailing styles, in different sections of our country, I believe *best* calculated to "combine [permanent] economy of construction, with convenience and saving of labor, in storing of hay and feeding the same."

Such a barn will require a locality inclining towards the south. Let the main barn, facing southerly, be 60 feet long and forty wide, with a leanto overshot extending in front twenty feet. I estimate this to contain near 100 tons of hay, &c.; then let hay houses extend 20 feet in width and height, in the form of an L, from the west end of the barn, of such length as to afford the additional storage necessary—say forty feet each.

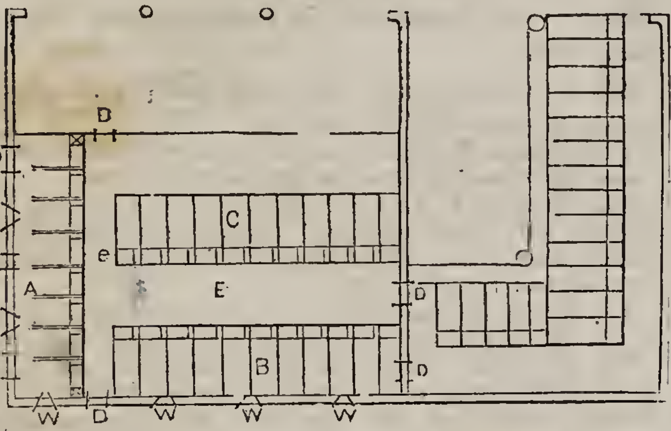

Fig. 1.

The ground floor of the main barn to be divided into stabling, as represented in Fig. 1. A, horse stables, 12 feet in depth, with mangers 2½ feet wide for hay, and small troughs at the side of each stall, for grain. B, cattle stalls, hung with swinging gates, opening sideways. C, the same, but each stall having a separate gate entering direct from the yard. D, doors. E, main entry, eight feet wide, to hold feed chests, &c.; e, entry 5 feet wide, with steps up to door D, at the north end, and having an entrance into the horse stables at each end, the entries to be laid with small stone and mortar; the remaining space under the barn and overshot to be open to the yard, and furnished with box cribs, so that out-door stock can have their fodder placed under shelter in stormy weather; in cleaning out stables, the manure may also be placed under here for protection from the weather. W, windows.

If additional *stall* room is desired, the twenty foot hay houses might be divided by a 5 foot entry on the outside, and stalls opening to the yard, as C; or the under story might be open to the yard, as additional shelter to stock and manure.

Fig. 2 gives the elevation of the west end of the main barn, 40 feet; overshot 20—the former having in front the large doors, 16 feet, and bridge wall; height to the square 30 feet—to the second floor 8 feet; this covers a granary extending through the center 14 feet wide, boarded at the sides, and the haybins each side of it, 20 by 60 feet. It is lighted by two windows in front, and has a door and window at the north end. It is partitioned on one side into bins for grain; the front end included in the overshot will make a good work shop. The third or threshing floor, eight feet higher, extends 14 feet in width (same as granary, which it covers,) from the bridgewall to the front of overshot, and is lighted by a small dormer in roof of overshot—(this may be scaffolded over head after the side mows are filled, for grain;) the large doors at the north end opening into a dormer covering the space between the bridge wall and barn. Each of the *main* hay mows should have a funnel four feet square, to pass hay to the entries below, and each of the overshot mows one to the yard. Grain from the threshing floor is passed into bins in the granary through three inch square holes, stopped with wedge shaped plugs.

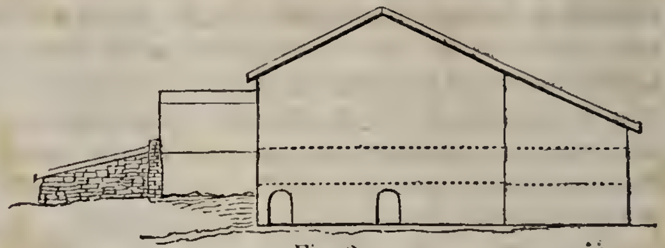

Fig. 2.

And now, as to the advantages of this plan, which I believe are greater than embraced by any other that has come under my observation. Roofing is one of the most expensive parts of building—here is the greatest amount of storage, stabling and other accommodation under the same surface; the hay not descending to the ground floor, is less liable to be affected by damp, and affords a much less harbor for rats and other vermin. In the hurried season of harvest, produce can be disposed of in the deep bays in one-fourth of the time required to pitch it upwards, and in winter can be dropped *immediately* where wanted below—while the stables can all be shut tight in cold weather, to keep them warm. The hay funnels act as ventilators to carry off impure air; grain, when threshed, is put away in the granary without any labor of bagging and carrying; the horse stables are entered without passing through the cattle yard, and the cattle stalls are as conveniently arranged as in other plans. The space under the bridgeway may readily be converted into a carriage or waggon-house; hay-houses, as proposed, or sheds in their place, would afford comfortable protection from north and west winds. If any further information, respecting farming or other minutia, is desired by correspondents, I shall be pleased to furnish it. I suppose the main barn to be built of stone at least as high as the third floor, except in front; the overshot may be of frame, on pillars level with the granary floor, or its ends may be a continuation of the barn walls. The above general plan, varied in size and details, receives the general sanction of the practical farmers of Chester County. *Pa., 3d mo.*, 1852.

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Gnawing of Rabbits.—J. T. Wilson informs the Michigan Farmer of the failure of several "*infallible*" preventives for this evil. He was told that any greasy substance, mixed with "lime, sulphur, hen-dung, tobacco juice, assafœtida, &c. &c.," [a rather unattractive compound, truly,] would be effectual; it deterred them for a few days, but they were soon at it again. A single mixture of lard and assafœtida was of no avail. A friend, however, informed him, (but he had not himself tried it,) that tanners' oil would repel both rabbits and sheep—that he would pay for all they would injure while the smell remained. Whether the oil will kill or injure the trees, is however, an interesting question.

Analysis of Soils and Pulverization.

Our readers are aware that we have always urged the insufficiency of simple analysis to determine the real value and productiveness of soils. Ingredients must not only be in sufficient quantity, but must be in such a state as to be *accessible* to plants during their growth. Nitrogen, for example, is admitted to be of the greatest importance to growing plants, yet every plant in the world grows in an atmosphere consisting of four-fifths of this ingredient in a free state, without being in the least benefitted by its presence; while the infinitessimal portions carried down as ammonia by the descent of rain, are eagerly caught and assimilated.

A late number of Silliman's Journal contains an analysis by D. A. Wells, of the soils of the best "bottom land" in Ohio, strongly corroborating this view of the subject. One specimen examined was from a field that had been planted successively for eighteen years, with corn, and had continued to yield without diminution, seventy to eighty bushels per acre. Another soil examined, had been cultivated fifty-one years, with forty-five crops of corn, and two or three of wheat, with scarcely diminished fertility, yielding now eighty bushels of corn per acre. And yet, D. A. Wells informs us, that these soils, "yielding with little or no culture, from seventy to eighty bushels per acre, *are no better, so far as their mineral composition is concerned, than many of the Massachusetts soils which have a reputation for sterility.*" The question immediately arises, to what do they owe their extraordinary productiveness? Doubtless in a considerable degree, to their large portion of organic constituents, but mainly, in the opinion of D. A. Wells, to the *fineness of their particles.* In commencing their examination, it was found that sieves ordinarily used would not answer; those were therefore procured, which were made of the finest gauze, the largest meshes of which by accurate measurement did not exceed *one-sixtieth of an inch in diameter.* One hundred parts of several specimens of soil passed through this sieve, left a coarse residue of from one-and-a-half to seven parts, and this residue was partly vegetable fibres and undecomposed organic matter. "This remarkable comminution of particles gives at once a clue to the secret of their great fertility. With this fineness an increased power is given to a soil for the absorption, retention, and condension of moisture, carbonic acid, and ammonia, an opportunity for the free permeation of atmospheric air, a facility to the rootlets of plants for extension, and consequently increased facility for receiving and appropriating nourishment." This is proved in a remarkable manner, by the double and often tripple crops obtained from thoroughly draining a wet soil, without the least alteration in its composition; and also by the utter uselessness of coarse manure badly mixed with the earth in a dry season.

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A Successful Cultivator.—Col. Wilder stated in his address before the New Hampshire Agricultural Society, that a gentleman who makes the cultivation of the strawberry his special business, raised on five-eights of an acre, more than three thousand boxes. These he sold by contract for the season at twenty-five cents per box, or about twelve hundred dollars per acre.

Agricultural Resources of the Great West.

About a twelve month since, we journeyed through Illinois and Iowa, to form an acquaintance with the agricultural resources of the Mississippi Valley; and embodied the opinions then formed, of the capacity of the country for agricultural purposes, into a series of practical papers, which appeared regularly through the columns of the Cultivator. Up to the present period, nothing has been presented to our observation which would in the slightest degree influence a retraction of the high eulogies then given, in favor of this valley becoming the granary of this continent, and even of Europe, if necessity require it; and, indeed, every day's experience only strengthens the opinion that our first impressions failed in doing justice to the vast interesting field for investigation that at all points of the compass was spread before us. Having now selected a prairie home, and being actively engaged in the practical pursuits of the farm, some additional weight to the opinions given, may be expected, over those that were made at a period when we were simply journeying through the country, for the purpose of forming an acquaintance with its natural and artificial resources. To somewhat relieve a monotony in style, which too often pervades matter of fact essays, such as the discussion of nearly all practical subjects are apt to induce, the interesting points forming the subject matter of a few remarks, will be given under their respective appropriate heads.

Wheat—*the cause of its failure and the remedies.* The western farmers rarely plow their land more than once for wheat, and oats and wheat stubble are found the most convenient rotation? Summer fallows are rarely made, and when this old fashioned system is practiced, the work is generally done in the most slovenly manner. Occasionally wheat is sown among corn, and sometimes after the corn is removed from the ground, a single plowing is given, and the wheat is then sown, and harrowed roughly in. But little or no attention is given to the drainage of the land; well formed ridges are rarely made; no pains are taken to drain the soil by the use of the plow, and underdraining, even on the most retentive soils, is never practiced. Indeed the great aim of the farmers appears to be to sow a great quantity of land with any given crop, without stopping to investigate their abililty of properly preparing the ground for the requirements of the crop. This careless and unwarrantable practice obtains favor by the easy process by which crops are grown, when the prairie sod is first broken. In the preparation of prairie sod for fall wheat, the only course pursued is to break up the sod during the early part of summer to the depth of from 2½ to 3 inches, after which the only labor necessary to ensure a crop of from twenty to twenty-five bushels per acre, is the sowing of the seed in September, and a thorough harrowing. Corn on sod, requires even less labor than wheat, and if the season be at all favorable, 40 bushels per acre may be expected, without any labor except the plowing and covering the seed. The labor and expense requisite to obtain 20 bushels of wheat, and 40 bushels of corn per acre, does not exceed $4; and the price of land being nominal, the single product of an efficient laborer, quite exceeds that which can be produced in any of the older states of the Union. The great facility with which crops are grown upon a newly broken prairie farm, are among the most prolific causes of the backward condition of the agriculture of the western prairies. As has already been shown, a trifling amount of labor will almost to a certainty produce a fair average crop of wheat and corn, on a newly inverted prairie sod; and owing to the great depth of the vegetable soil, ranging from one to three feet, even on the high rolling lands, the inference is made, that the sod once broken will continue to yield abundant crops, with a trifling amount of labor. Experience has clearly shown the fallacy of this opinion, and although the soil contains all the elements requisite to produce bountiful crops of the cereal grains, for an almost indefinite period of time, yet the prevailing practice of husbandry appears admirably calculated to dispirit that portion of the farmers who depend upon the cultivation of bread stuffs. Contrary to the expectations of the first settlers of the Great West, the wheat growing business is subject to more casualties than is experienced in timbered countries; and in many cases the business has been abandoned, under the prevailing notion that a prairie soil, when subjected to a severe course of cropping, is unadapted to the growth of wheat. This opinion ebbs and flows, according to the result of the harvests; and seasons like the present, when the crop is almost universally a good one, it would find but few advocates; whereas, last year, the almost entire failure of the crop so far discouraged the wheat growers, that it was difficult to convince those engaged in the business, that the country was admirably adapted for the production of wheat, and that by good cultivation it might be made as profitable on the western prairies, as in any other portion of this continent. The practice that prevails in Illinois, would produce still more favorable results in Michigan and Ohio, and a similar system practiced in New-York and Pennsylvania, would not produce sufficient to defray the costs of harvesting the crop. The error is in the practice, and cannot in any respect be attributed to any natural defect in the soil, or to the rigorous character of the climate. Although the soil is free of stones, roots, and all other obstructions, yet the plowing is carelessly done, and much of the land is overgrown with weeds; and, on the whole, the agricultural prosperity of the country is in a worse condition than that of any other portion of the Union with which we are acquainted.

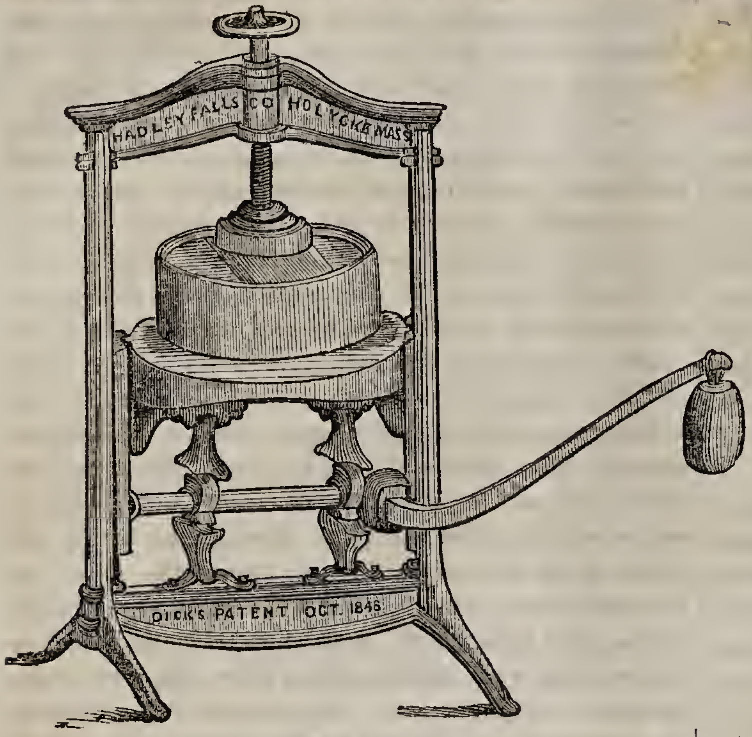
The remedy by which a more wholesome state of things might be brought about, may be speedily summed up. In addition to what appeared in the papers already prepared on prairie farming, but little need be added, as the plans pointed out, if honestly practiced, would secure to the western wheat grower, as large an average yield of wheat, for the labor expended, as could be obtained in any other portion of this continent, and that too, by the expenditure of a much less capital than would be necessary in New-York or Ohio. As some time has elapsed since those recommendations alluded to, appeared in the Cultivator, a mere summary may be given. A proper rotation of crops, by which wheat will be grown only once in a period of four years, is essential to secure success. During that rotation clover should intervene, and in fact, should be made to precede the wheat crop. Wheat after clover is a much more certain crop than when grown upon a purely virgin prairie soil. The clover roots are calculated to deepen the active soil, and the inverted clover sod, when a strong growth of clover is turned under, imparts a vigorous growth to the wheat plants, by which the roots obtain a strong and healthy growth, enabling the crop to endure the rigors of a severe winter. In all cases where drill culture can be successfully practiced, it should be adopted, as wheat plants standing in rows, and being deposited some four inches below the surface, take a much firmer root, and will not be nearly so apt to winter kill, as when scattered promiscuously over the ground. Liberally seeding the ground is of the greatest importance, and in an average of cases two bushels per acre will not be found too much, as the ground should be perfectly matted with a covering of plants at the setting in of winter.

The labor necessary to produce a crop of corn, by judicious management, might also be made to yield a crop of wheat. In this case the clover and timothy would have to be sown with oats or barley, and the corn would follow in succession after the clover. In some respects, corn is a better preparative crop for wheat than clover, for a bleak prairie country. The course to pursue when this rotation is adopted, is to plant the corn in drills five feet apart, making the hills in the rows average about 18 inches asunder. The corn would have to be worked lengthwise, or only in one direction. About the last of August the sowing of wheat may be commenced, and continued throughout September. The seed should be plowed in by the use of a small one horse plow, forming neat ridges of six furrows, thus making a neat water furrow at the center of each row. The corn in this case, should be harvested on the ground, leaving the stalks to stand, to protect the wheat plants from the severe winds and frosts of winter. After the frosty season has passed in the spring, the corn stalks should be cut up close to the ground, and carried off the field and burned. By this plan, nearly as much corn can be grown, as by the ordinary method of planting in rows in opposite directions across the field, and the yield of wheat will exceed what can be obtained by any other process, costing a comparative trifle in cultivation over and above what would be necessary to secure a good crop of corn. Other suggestions, applicable to the culture of wheat on the prairies, might be added; but if the systems recommended in the series of articles prepared by the writer during the last twelve months, be practiced, what is now a very uncertain, and in many cases, ruinous business, might become a reliable and profitable operation.

Indeed, in no portion of the world could the business of wheat growing be more extensively and profitably prosecuted, than in a very large portion of Illinois, Iowa, and Northern Missouri. An enterprising farmer, with ample means, might, if needs be, extend the business of wheat growing to almost any scale that his ambition might lead him. One hundred acres of wheat, to be sown among corn as recommended, would actually cost less labor to produce it, than would be necessary to produce 20 acres in New-England, where thorough naked summer fallows have to be made to secure a yield of 20 bushels per acre. The wheat crops in the prairies are not much subject to rust, and not very liable to lodge. The almost constant currents of wind that pass over the prairies, prevent these two drawbacks, which are the most formidable that have to be borne by the eastern wheat growers. Smut, which is so common in New-York and Pennsylvania, is almost unknown in the west. These, and other reasons that might be adduced, should be sufficient to convince any inquiring mind, that the prairies of the Great West must, so soon as public attention has been fully drawn to them, become the great and unrivalled granaries of this continent—yielding, when proper labor and capital has been expended, a much greater return in profits than can be had in any other portion of Christendom.

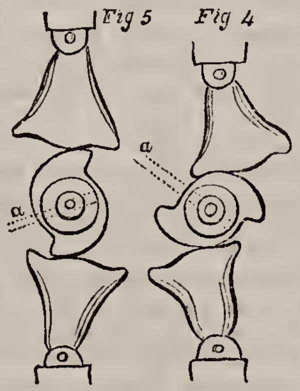
Corn—*its cost of production and profits.* The great staple of the northwest is corn, and it may be a matter of some curiosity to eastern farmers, to know precisely how much it actually costs a western farmer to produce a crop yielding, say 60 bushels per acre, and also the most successful methods of cultivation for the corn crop. Fall plowing is not usually practiced, and hence the land only gets a spring plowing before planting. After plowing, the ground is sometimes harrowed, and the next process consists in marking or listing the rows in opposite directions across the field, forming at the angles of the furrows, points or hills for the depositing of the seed corn, which is ordinarily done by hand, requiring the seed to be covered with a hoe. When the plants of corn become sufficiently strong to be seen distinctly in the rows, the plowing or horse hoeing, commences, which most usually consists of a shovel plow, sometimes a one horse plow, and in rare cases, a steel-tooth cultivator. From three to five dressings are given, and the crop is generally laid by, as the time of finishing the business of clearing the crop is styled, during the latter part of July. One able bodied man will easily attend twenty five acres of corn during the entire season; and when the labor is performed with care, an average yield of from 60 to 80 bushels per acre, may be anticipated. When all the cost of producing corn is fairly calculated, including the rent of land, it will be found to average about ten cents per bushel, which, of course, includes the harvesting of the crop. In favorable seasons, and under peculiar circumstances, corn can be produced at a less price than ten cents per bushel—but at that price it is safe to make the estimate for any given number of years; though to secure that result, and do justice to the land, the corn crop should be grown in regular order with other crops, yielding only one crop upon the same land, in periods of four or five years at most. The requisite elements for the production of corn are sufficiently abundant in a deep vegetable prairie soil, to produce, if necessity required it, twenty consecutive crops; but the average yield will not be so great as when it alternates with clover, wheat, and other crops.

A marked peculiarity in the climate of the entire Upper Mississippi Valley, and which strongly influences the pursuits of agriculture, is the extreme protracted and backward springs, and the equally lengthy and beautiful autumns. The cold rains, and chilly north-west winds, that prevail in spring, prevent the farmer from making as much progress with his seeding, as is usually done in mountainous regions of the country; and the planting of corn, from this cause, is frequently extended into June, even in latitudes as far south as 40 degrees. There the subsoil is calculated to retain an excessive amount of moisture, so as to endanger the rotting of the seed corn; a very reliable remedy may be adopted by every farmer, whether he farms in the western, eastern, or northern portion of the Union. This may be done by plowing the land in the autumn into ridges or ribs, the width required for the rows of corn. Four feet is the ordinary average, and therefore, to plow so wide a ridge with one furrow, a very heavy plow will be required, and a strong team, say three yoke of oxen, or three horses abreast. The process consists in plowing only one half of the land, and covering the unplowed portion with the active soil turned by the plow, guaging the width and depth of the furrow by the capacity of the plow, the strength of the team, and the distance the rows of corn are required to be apart. A plow that will turn a furrow fifteen inches wide, and ten inches deep, will form ridges the proper width for corn. The plow should be set so as to constantly throw the soil towards the unplowed land, in which case the furrow horse will be required to walk on the land, close to the edge of the furrow, securing by this means the open furrows from being filled up by loose soil; and the entire surface exposed to the action of the air, frosts, and the sun, will be new soil, or that which had been recently acted upon by the plow. By this system of autumn plowing, a man and a team may easily plow from three to four acres per day; and as each furrow will form a complete drain, the fall, winter, and spring rains will pass off the land, leaving the entire surface at all times dry, and in a finely pulverised condition. The soil from the top and sides of the ridges, will crumble down by the action of frost, and partially fill the furrows, so that when the season for planting corn arrives in the spring, the soil in the bottom and sides of the furrows, will be permeable, and be in the best possible condition to secure the early germination of the seed corn. About the first of May, the land should be again plowed for planting, which should be done by the use of a plow that will turn a furrow from 12 to 15 inches wide, and some nine inches in depth. Two furrows of the above proportions should be thrown together between each of the ridges, leaving unplowed a large furrow in the shape of a turnep drill. The two furrows being turned together in the shape of the crown of a ridge, and the soil being made extremely light by the action of frost, the ridge or crown furrows, thus made, will make the best possible seed bed for the germination and growth of the young and tender corn plants. The seed, of course, must be planted upon the top of those furrows, and as a deep water furrow of some nine inches in depth, will be on each side of the seed bed, an excessive amount of spring and early summer rains, will not have the slightest injurious effect upon the vitality of the seed, or upon the growth of the young plants. When the corn requires to be plowed, the middle furrow may be levelled down, and the after cultivation need not, in any particular, differ from what is ordinarily practiced. If such a system as the foregoing had been generally adopted by western farmers the past season, it would have added to the corn crop many millions of bushels, and the farmers would have saved the expense and trouble of replanting their crops. By this process, a much larger surface is exposed to the action of frost and air, and the ground is at all times in a suitable condition for the reception of seed. It will be found a great saving in the expense of plowing, and when the work is properly done, it will add largely to the average yield of grain, and lessen the amount of labor necessary to keep the crop clear from weeds. W. G. Edmundson. *Keokuk, Iowa.*


HADLEY FALLS CO HOLYOKE MASS
DICK'S PATENT OCT. 1848

Dick's Cheese Press.

This admirable press, made mostly of cast-iron, was lately exhibited at Geneva on the grounds of the New-York State Agricultural Society by J. E. Holmes, of Holyoke, Mass., from which we have made the above figure. This press is remarkable alike for its ingenuity, simplicity, efficiency, and durability—and may be used for centuries without getting out of order. Figs. 4 and 5 show the manner in which the platform supporting the cheese is elevated by depressing the lever and weight. Fig. 4 exhibits the appearance with the lever *a* raised, and Fig. 5 the same borne down; the surfaces in contact merely rolling over each other, there is little or no friction. It is regulated by the screw operating in the upper bar. In order to try its strength, one of these machines was strained till it broke, when it was found that the pressure was equal to *sixteen tons*. Hence they are warranted to sustain a force of ten tons. We placed blocks of wood as large as a brick in the press, and found by the force of one hand on the lever that these blocks were flattened and the sides swollen out as if they were but bags of sand. The price of the press is $25, and it is doubtless the cheapest thing of the kind for large dairies.



J. E. Holmes also exhibited Dick's instrument for punching holes in iron, constructed on the same principle. This principle has a peculiar advantage as applied to punching, for by a proper form of the curves of the rolling faces in the instrument, the power can be increased or lessened at any part of the operation—the first movement in punching a hole requiring more power than after the removed portion of metal is nearly driven through. This instrument possesses such efficiency that a single person has driven a hole half an inch in diameter through a cold bar three eights of an inch thick by a single stroke of the lever.

Wens on Cattle, &c.

Eds. Cultivator—The cause of wens on cattle, is some local injury. They should neither be sacrificed nor eaten in that condition, but cured. Mr. F. Punderson, of Hudson, keeps a remedy that cures fistulas on horses, and might cure wens on cattle. Should it fail, however, the remedy would be to cast the animal, and with a long, keen sharp pointed knife, the flesh should be cut away around the place of discharge, sufficiently to remove to the bone, a tough pipe which will be found to have formed there. Nitric acid should then be poured into the wound, after which a few cleansings with water, at periods of a week each, will effect a cure. I have known it to be repeatedly tried, and ever without failure, even where the bone had been far gone with caries.

Mr. More's Farming.—Several of your correspondents allude to the success of Mr. More, whose farm received the premium from the State Agricultural Society for 1850.

Had Mr. More been located twenty, instead of two miles, from one of the best markets in the country—had he been compelled to pay four shillings, instead of four cents, ber bushel, for the thousand bushels of lime he applied to his farm—had he been deprived of the hundreds of loads of manure which he was enabled to buy at a mere nominal price—had he been deprived of the opportunity of earning hundreds of dollars, during the leisure of his teams, for Mr. Van Rensselaer and the State Agricultural Society—had his large amount of garden vegetables, beyond the requirements of his own family, been worth no more to him than so much pursley, he would still have shown himself the good farmer, and perhaps the best in the state; but his success would have attracted much less public consideration or attention. J. F. C.

Drying Tomatoes.

[The following has been furnished us by a very skilful housewife, who is particularly successful in the preparation of garden products—we have tried her dried tomatoes in winter, and found them most excellent. Ed.]

The method is very simple. They are to be peeled in the usual way; then if very ripe pour off some of the juice, stew them slightly, sufficiently to cook them through, and salt them to the taste. Then spread them on earthen (not tin) dishes, and put them in a warm oven. The best way is to put them in a brick oven, when the bread is taken out, but a stove does very well. They cannot be dried in the sun like peaches; they are so juicy they need more heat. When dry, put them in bags, and in winter they only need soaking an hour or two, then stew and season with butter and pepper, and one would hardly distinguish them from fresh fruit.

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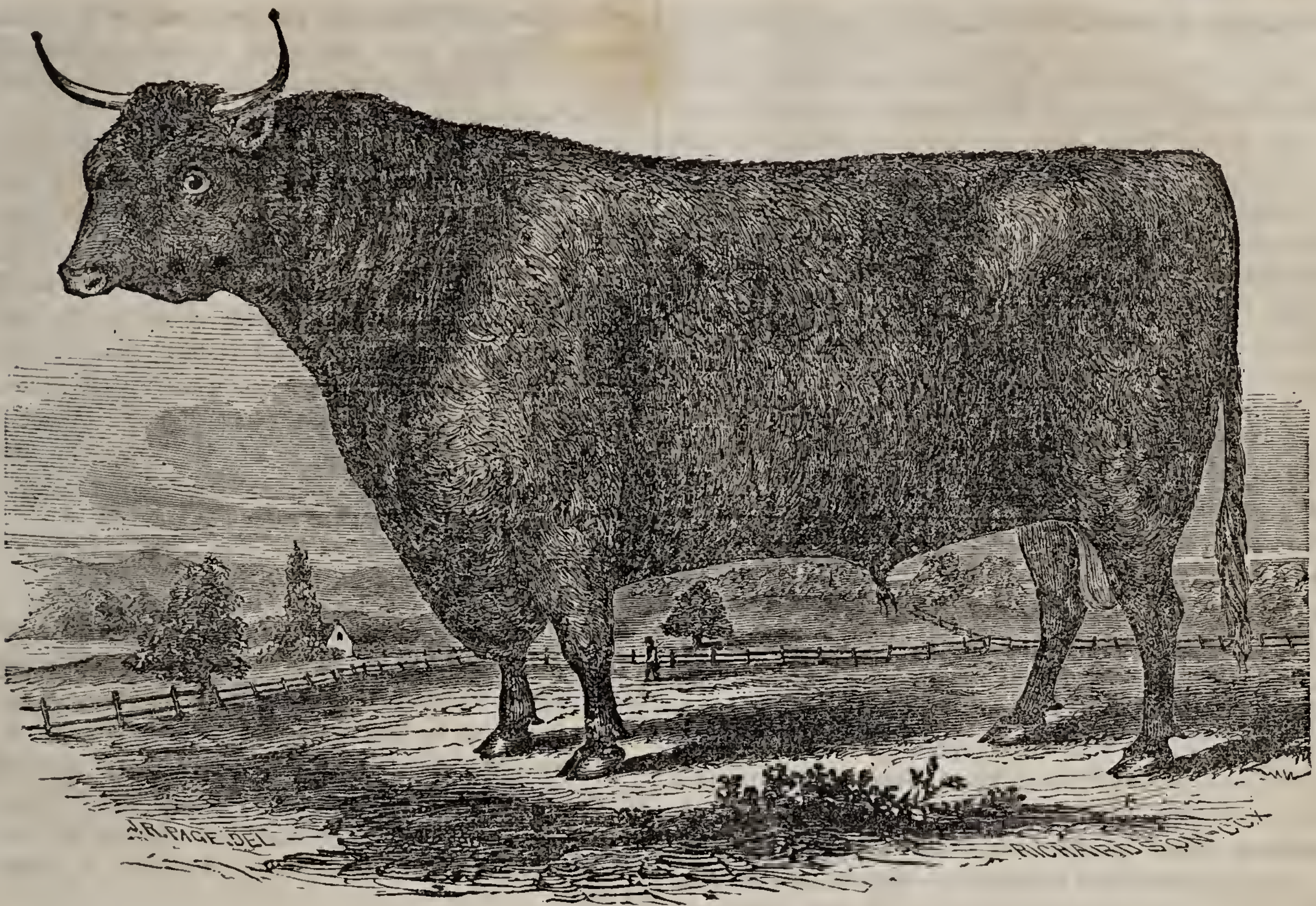
To Fatten Poultry.—Shut them up in the dark, gorge them with boiled food, and allow them a small quantity of charcoal daily. Every meal that a man makes on such food adds a nail to his coffin.—*Ohio Farmer.*



Mr. Colby's Devon Bull Champion.

The first premium for Devon Bulls over three years old, at the late State Fair at Utica, was awarded to "Champion," owned by Mr. L. H. Colby, Scipioville, Cayuga county. The portrait of him, given above, is from a drawing made by Mr. J. R. Page, of Sennett, engraved by Richardson & Cox, New-York.

Champion was calved June 28, 1844—got by Rover, a Patterson bull, out of Venus, a pure Devon of Rufus King's stock, from Mr. Coke's, (Lord Leicester's) stock. Rover, the sire, was by Eclipse, Geo. Patterson's superior imported Devon bull—dam by Anchises, also imported by Geo. Patterson. Eclipse was bred by Mr. Bloomfield, on Mr. Coke's estate, Norfolk, England, and sent to this country as the best bull of his day. Anchises was raised by Lord Leicester for his own use.

Champion has heretofore received the following premiums: 1st premium at Poughkeepsie, N. Y., for the best bull calf—also same year at the American Institute. 1st premium at the American Institute for the best 1 year old, 2 year old, and 3 year old bull, and the 1st at Hartford (Ct.) County Show, in the fall of 1848

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"Things that I have Seen."

The Hampshire Express, (Amherst, Mass.,) copies the article under this head, from the Cultivator of August, and appends to it the following list of things which the writer might see if he would visit East Hampshire, where prudent farmers must be more common than in many other sections of our country:

1. He would see fences on many of our farms, so well mended up before planting, and kept in so good order through the year, that the cattle, honest creatures, never suspect it possible to get over or through them.

2. He would see farmers so considerate of their own interest and of the public good that instead of letting their swine run in the road, they keep them in suitable pens, giving them a dry place to lie and a wet one to wallow in, and by putting in leaves, dried muck, road scrapings, anything which they can easily come at, so as to make five, eight, or ten loads of compost to each grunter.

3. He would see farms so free from bushes, windfalls and waste corners, that he would be tempted to alter the phraseology of the wise man, and say, "I went by the field of the industrious and the vineyard of the man of understanding, and lo, it was all grown over with corn, grass, and other useful products, excepting a few beautiful trees under whose shade the herds might repose in comfort, and here and there a lovely copse which it would be infamous to cut down."

4. He would see farmers, who *practice* well, not over fond of theories, but when something new is shown to be good, ready as reasonable men, to adopt it.

5. He would see farmers who are unable to cultivate flowers half their summer, but who have an excellent kitchen garden, with flowers tastefully interspersed, the whole presenting such a picture of beauty and utility, as could hardly be surpassed, and whose children, instead of roaming in idleness, are oftener found reading the best agricultural and other periodicals.

6. He would see farmers who have a place for every tool, and every tool in its place, not forgetting that their tools wear out fast enough without suffering them to rot and rust out by exposure to the weather.

7. He would see farmers, who pay for agricultural papers much more cheerfully than for trash; who are justly conscious that they know much of farming, but are desirous of knowing more, willing to learn from a publication, a scientific man, or a practical farmer, as best they can. In short, he would see such a spirit of inquiry as would convince him that the farmers of this region will soon leave behind them others of regions more favored in soil and climate.

8. He would see that as good husbandry advances, farmers become less officious in their neighbors' business, and more intent upon their own; and that in this respect they are already ahead of merchants, lawyers, doctors, ministers, loafers, gentlemen, and all the rest.

"The Early Mandan Corn.---(*Zea mays v. præcox.*)"

In his "*Genera of North American Plants,*" Prof. Nuttall, who visited the Mandans, and named this variety, says: "Stem, very low, spathes arising from the base of the culm"—in other words, *keeping comparatively close to the ground,* in accordance with a principle often obtaining amongst other plants that extend into severer climates—that of shortening their stems.* He adds, "successfully cultivated by the aborigenes of the Missouri to its sources [?] ripening in a climate where no other variety could exist."

George Catlin also in his "*Illustrations of the Manners, Customs, and Condition of the North American Indians,*" says, "The Mandans raise a very small sort of corn, the ears of which are not longer than a man's thumb. This variety is well adapted to their climate, as it ripens sooner than the other varieties, which would not mature in so cold a latitude."

It is generally understood that Indian corn indigenously is a tropical plant, though the Pilgrims who landed on Plymouth Rock found it cultivated by the Indians in that vicinity; but why it has been acclimatized further north on the Missouri than in any other region, the following remarks from Catlin's work, may assist in explaining. though he has not referred to this subject.

"I have descended the Missouri river from the Mandan village to St. Louis, a distance of 1800 miles, and have taken pains to examine its shores; and from the repeated remains of the ancient locations of the Mandans, which I met with on the banks of that river, I am fully convinced that I have traced them down nearly to the mouth of the Ohio river; and from exactly similar appearances, which I recollect to have seen several years since in several places in the interior of the state of Ohio, I am fully convinced that they have formerly occupied that part of the country, and have from some cause or other, *been put in motion,* and continued to make their repeated moves until they arrived at the place of their residence at the time of their extinction. on the upper Missouri.

"The marks of the Mandan villages are known by the excavations of two feet or more in depth, and thirty or forty feet in diameter, of a circular form, made in the ground for the foundations of their wigwams, which leave a decided *remain* for centuries, and one that is easily detected the moment it is met with. After leaving the Mandan village, I found the marks of their former residence about sixty miles below where they were then living, and from which they removed (from their own account) about sixty or eighty years since. Near the mouth of the big Shienne river, 200 miles below their last location, I found still more ancient remains; and in as many as six or seven other places between that and the mouth of the Ohio, and each one, as I visited them, appearing more and more ancient,—convincing me that these people have gradually made their moves up the banks of the Missouri."

George Catlin further remarks that after the season for *green* corn is over, "the remainder is gathered and dried on the cob before it has ripened, and packed away in *caches* (as the French term them)—holes dug in the ground some six or seven feet deep, the insides of which are in the form of a jug, and tightly closed at the top. Now it is remarkable that "the Pilgrims" found Indian corn buried in the same manner, soon after their arrival at Plymouth; and Catlin might have found in this circumstance an argument in favor of his theory; for two tribes living 3,000 miles apart, in all probability derived this singular custom from the same source. D. T.

Potato Disease.

The Legislature of Massachusetts, in the year 1851, offered a prize of $10,000 to any one who should satisfy the Governor and Council that, by a test of at least five successive years, he had discovered a sure remedy for the potato rot. Several communications have been received on this subject, which are published by the authority of the legislature, of which we publish the following summary by Hon. Amasa Walker, Secretary of State:

Although these communications may not furnish any perfect cure or preventive of the potato disease, yet they agree in so many important points, and offer so many valuable hints, relating to the nature, cultivation, preservation, and improvement of the potato, that they cannot fail to be of great public utility. The similarity of views expressed by the most intelligent and experienced writers, relating to the nature, cultivation, disease, and cure of the potato, is truly remarkable, and we think auspicious. Among the principal points, relating to which there is a general concurrence. are the following:

Soundness and vitality of the Seed.—Renewing the seed from the ball of healthy vigorous plants every few years, even resorting to the native place in South America, and taking the seed from the wild potato, is considered important. When potatoes are to be raised from the tuber, sound, healthy, whole potatoes are recommended for planting. Cutting potatoes is decidedly condemned. Anything which impairs the vitality of the seed increases the liability to disease.

Quality or kind of Soil.—A dry, light, loose, warm soil, is considered necessary to the soundness and health of the vegetable, as well as to its richness and flavor, the latter depending quite as much on the quality of soil as on the variety of seed. A wet, heavy, compact soil, directly promotes the disorder. Far up on the side of a mountain or hill is a favorable location for the growth of the potato: and new land contains more of the qualities requisite for its nourishment and health, than old or worn out soils.

Influence of atmosphere.—Potatoes should be as little exposed to the air as conveniently may be. Their natural place is under ground. By too much exposure they become poisoned, and turn green. Some recommend depositing them for the winter in holes under ground in a dry soil; or if kept in a cellar, to preserve them dry, in small quantities, in sand; and to keep them cool. Keeping large quantities in a body in the cellar is by some supposed to promote heat and putrefaction. Planting in the fall is recommended by some. as potatoes left in the field, over winter, are observed to come forward earlier in the spring, to grow more vigorously, to get ripe earlier and before the blighting rains in August, and to be more sound, fair, and healthy.

Manures.—All antiputrescents, such as lime, wood-ashes, pulverized charcoal, plaster, salt, nitrogen, &c., are believed to contribute directly to the health of the potato, as well as to add to its richness and flavor; and, of course, to prevent putrefaction and disease. Of other manures, well-rotted compost is preferred. Stable manure is too strong and heating, and produces ill-flavored, unhealthy potatoes, and is decidedly condemned.

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* Thus the *bay-berry* or *wax myrtle*, grows two or three times as high in South Carolina, as it does in Western New-York; and the gigantic *live oak* of Florida dwindles to a shrub on the eastern shore of Virginia.

In regard to Indian corn extending into higher latitudes—the earliest ears will be the most perfect, and the later be cut off by the frost. So in selecting seeds for the kitchen garden, the finest and earliest specimens are generally preferred; and though the change from year to year may be slight, yet the *accumulation* of changes in the course of an age, may be very considerable.

Disease, Contagion, Old Age, and Death.—These are common to vegetables as well as to animals. All are liable to disease, some more, some less, according to circumstances, predisposing causes, and preventive means. Some vegetable diseases are believed to be contagious. The present disease is thought by many to be of that class. One field of potatoes is liable to take the disorder from another field. Potatoes are predisposed to disease, by bad cultivation, old age, bad soil, bad manures, sudden changes of weather, warm rains, &c.

Ravages of Insects, Fungi, &c.—The best writers consider the ravages of insects as at most but a predisposing cause, rendering the potato more liable to disease by enfeebling the plant. By many writers insects are considered as remotely affecting the potato; by others, as having no effect at all. The fungus on potatoes is not the cause of the rot. It finds the potato, previously diseased, a fit subject for its operation.

The general conclusions to which the facts presented in these various communications seem to lead us, are—

1. That the disease has a striking resemblance to the cholera, and probably exists in the atmosphere.
2. That it is doubtful whether any specific cure has been, or ever will be discovered; but
3. As in cholera, certain preventives are well ascertained, by the application of which, the liabilities to disease may be greatly lessened.
4. That by obtaining the soundest seed, by planting in the most favorable soils, and by using the most suitable manures, we may have a good degree of confidence in the successful cultivation of this useful vegetable.
5. That we may expect, that like the cholera, the potato rot will become less and less formidable from year to year, and eventually subside into a mild and manageable epidemic, if that term may be used in such a connexion.

The several points on which there is an unanimity of opinion, are worthy the especial attention of farmers. By a careful selection of seed, and locality, and particular reference to the kind of manure used, very much of this disease may be avoided. If facts like the above, well substantiated by experiments in all sections of the country, could be presented to the entire mass of farmers, and they would govern their modes of culture by rules so established, we cannot well estimate the increase which would result in a single year in a crop so extensively cultivated as the potato.

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Lime Burning.

Dear Sir—The informaton asked for in your August number, by Isaac A. Clark, "as to the best mode of burning lime for agricultural purposes," is important to farmers, and I wonder there has been no premium offered by any of our agricultural societies, for the best constructed lime kiln; there has been some talk about improvements, but as the old form is still kept up by those who are largely in the business of burning lime, we must believe there has been no real improvement yet made.

In the 4th vol. of the "American Farmer," page 388, there is a drawing of a square kiln with two eyes, and a description of it, by Edward Stabler, Esq., of Montgomery county, Md., but I cannot conceive any advantage in that form. The late Dr. Ducatel, geologist of this state, recommended kilns to be made twenty feet high, and the limestone to be broken small. All practical burners in this vicinity say they will not burn out when more than 16 feet high. Some men from Pennsylvania have burned lime quite recently, in the neighborhood of Frederick, in temporary kilns, constructed something like brick kilns, with satisfaction to their employers; they burned 1,800 bushels, with 32 cords wood. I expect them to burn a small kiln for me very soon; their charges are for 2,000 bushels and over, two cents a bushel—under that quantity, two and a half cents a bushel. The advantage of this mode is, you can have the lime made where you wish to use it. Your correspondent wishes to know "the most durable material to build of." For lining, firebrick or soapstone is best. In order to get at "the cost per bushel for burning lime," the price of fuel, labor, stone, &c., must be known; here, coal burned, (in a drawer, or perpetual kiln,) is the cheapest. Coal is worth about $3.50 a ton; wood, $2.00 to $2.50 a cord. Lime is sold at the kilns, coal burned, at 10 cents, and wood burned at 12½ cents a bushel. Wm. C. Hoffman. *Pomona, (near Frederick,) Aug.* 9, 1852.

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Cream Thermometers.

Thermometers, such as C. H. Powel, of Poughkeepsie, wants, are made. There is one in this neighborhood; it was obtained in Philadelphia, and is a German article. Two glass tubes, one covering the other, and the degrees marked on a piece of paper between the two tubes, with two scales—on one side, "Thermometer nach Fahrenheit,"—on the other side, Centigrade or Reaumer, I forget which. It being externally all glass, if carefully handled, is "durable and easily cleaned." Wm. C. Hoffman. *Pomona, (near Frederick,)* 1852.

◆

Cheap Ice Houses.

Mr. R. R. Wright, asks the best method of constructing small ice-houses; and as I suppose he means such as shall cost but a trifle, and yet preserve ice enough for use on a medium size farm, I will answer his inquiry by describing a method that has been in use by my brother for several years, that has given him perfect satisfaction.

He selected in a *porous* soil on the side of a hill, for convenience of access, and dug a square hole about ten feet deep, and six feet across. He then took some square pieces of timber of the length of the hole, and four inches in thickness. To the outside of these timbers, he nailed rough boards, so as to make a square crib or box, with the boards on the outside. He then placed this in the pit, and lined up on the inside of the timbers with more rough boards, so that he had a double boarded crib with a space of four inches between the internal and the external boarding. This space was filled with spent tan bark, or saw dust. There was no floor to the pit except peices of boards covered with saw dust, and if the ground be not porous there should be a drain to carry off the water from the ice as it thaws. It is necessary that the ice pit should be ventilated. Such a pit can be made by any one, and when the ice is formed it should be packed nearly full, fitting pieces of ice so as to pack closely as possible. The top should be covered one or two feet thick with straw, and over this should be placed a loose roof of boards, that will exclude the snow and the rain, yet will not prevent the access of air.

An ice pit, of the size indicated, will contain sufficient ice to supply all the wants of a large dairy farm for the entire season—and as it *costs* nothing but a little labor, one should be made on all farms where this luxury can be obtained. Others will doubtless describe more elaborate and expensive as well as better structures, but some may be induced to try this method of preserving ice, who would not be willing to incur expense.

It may be that level ground would be preferable to a side hill, but such a situation was chosen by my brother, and he is highly pleased with it. C. H. Cleaveland.

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To Cure Hams.

Ed Cultivator—As I have seen numerous receipts for curing hams, and as I have tried the annexed for several years, and found it to excel every other in my estimation, I take the liberty to send it to you, that you may publish it for the benefit of any who may be disposed to try it. By letting my ham remain in the pickle, it is less trouble to keep it than by any other method which I have found, and it keeps sweet and tender all summer.

Take a barrel, and turn over an old pan or kettle, and burn cobs, (I think the best,) or hard wood, for seven or eight days, keeping water on the head to prevent drying. Make a pickle with eight pounds of salt, six ounces saltpetre, two quarts of molasses, and three gallons of water, to one hundred pounds. Boil and skim the pickle thus prepared. Then pack your ham in the barrels, and when the pickle is cold, pour it on to the meat, and in four weeks you have excellent ham, very tender, and well smoked. P. F. E. *Nashua, N. H.*

◆

The True Course.

With energy for prompt and vigorous action, and capacity for sober thought and sound reflection, a man may enter upon business with some assurance of success. His home will exhibit the best picture of his true character. What he undertakes is well done. His fences are in order—there is an air of neatness and thrift about his dwelling and out-buildings; his grounds are laid out with reference to beauty as well as convenience—ornament and use have been consulted in planting out his fruit and shade trees, and the garden evinces that his wife and daughters have joined him in his cultivation. He does not waste the long winter evenings in idleness, nor do his family neglect this season of improvement. While his children are engaged in the rudiments of learning, he surveys the action of our National and State Legislatures; and studies thoroughly the policy by which both are guided. His family do not content themselves with the light reading of the day, but history, biography, morals and religion receive a due share of attention. They lay up in winter, from reading, conversation and reflection, a harvest of more value than the bounties of autumn. The mind thus stored, casts light upon any vocation. It cheers the house-wife in her round of duties and lightens the labors of the field. *Address of* Hon. T. Jenkins *before the Oneida County Ag. Society.*

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Give a portion of each day to reading, and study. Think not because you are a farmer, literary acquirements are useless. They are as necessary to the full attainment of a knowledge of agriculture, as of any other science.

Jefferson County Agricultural Grounds.

At the invitation of the President of the Agricultural Society, we rode down yesterday to view the improvements made and in progress at the Society's show grounds, which were merely enclosed for last year's exhibition. Recently the old building in the rear of the Court House has been taken down, removed to the fair grounds, newly covered and added to, making it now a very spacious and comely appearing building. It is now 105 by 60 feet, with an addition in the center, on one side, extending back 15 feet, and 30 feet long, forming a platform and the speaker's stand, elevated some four or five feet from the floor. In front of this is the secretary's desk. Through the center of the building is to be a row of tables for the exhibition of domestic manufactures, fancy articles, needle work, specimens of art, &c., &c., and around the whole, except the recess for the platform and the speaker's stand, there are twelve rows of seats, elevated one above another, so as to render them comfortable, and in full view of the whole Hall, and capable of accommodating over two thousand persons. By placing temporary seats on the floor, 3,000 can comfortably be seated within the Hall.

A temporary building is to be erected on the west side of the Hall for the exhibition of agricultural implements, machinery, &c., which, with the one already built on the east side, for dairies, grain, vegetables, &c., will afford ample room for the occasion.

Permanent pens are erected around by the fence, and a large number of posts are firmly set in the ground, to which cattle and horses may be hitched. The old stumps have been dug up and removed, and the surface is being leveled. A good well has been dug within the enclosure, which will furnish the water required for man and beast. The committee will provide feed for the cattle, which will not be a charge upon the exhibitor. Arrangements have been made with the Railroad Company, to transport all animals or articles designed for exhibition, *free of charge*, if presented on Wednesday, the day before the fair commences. Passengers taken at half price from any station on the road, and from Kingston. It is hoped that this arrangement may induce a large number of our Canadian neighbors to visit us, and to exhibit to our farmers some of their choice stock.

Great credit is due to the Society for their liberality in the purchase and improvement of the grounds, and in a few years, if the same enterprise is manifested, it will become a very attractive spot. We doubt whether any County Society in the state is as well provided for in this respect, as Jefferson. Indeed, the whole arrangements are on the most liberal scale, and cannot but meet the approbation of the farmers who have so liberally contributed to the purchase and improvement of the grounds. The work, thus far, has principally been under the direction of Hart Massey, Jr., Esq.—*Northern Journal.*

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Culture of Cranberry Vines.

The variety mostly cultivated in New-England are hardy and prolific

They can be raised on upland on rather moist loom—but do the best on low, damp or moist *meadow land*, with a little sand put around the plant.

They may be planted out 1½ to two feet apart, each way.

Two feet apart, it will take 10,000 plants to the acre; if on low ground it should be pared, plowed, or burnt over, to take out the grass or weeds, and cultivated for one or two years, until they cover the ground. The yield after that is from 150 to 250 bushels per acre. They are usually gathered with a cranberry rake, to be found in any agricultural store.

It is not necessary to flow meadows in order to make them productive. F. Trowbridge.

◆

An Enormous Tax upon Farmers.—The dog population of the United States is estimated at about two millions, and the expense of keeping them at upwards of $10,000,000 per annum.

NEW PUBLICATIONS.

REPORT ON THE WORLD'S FAIR. By Col. B. P. Johnson, Cor. Sec. N. Y. State Ag. Society. C. Van Benthuysen: Albany.

This volume comprises a full description of Crystal Palace and the Great Exhibition, having reference more particularly, however, to those departments which have a practical bearing upon the interests of this country, and are most useful and important. Mr. JOHNSON had an excellent opportunity of judging correctly of the exhibition, as he was one of the jurors and a member of several committees, and has presented to the public much information of a desirable and reliable kind. The book contains a list of the awards to American contributors and descriptions of many of the more prominent articles of interest on exhibition.

LIFE AND WORKS OF ROBERT BURNS. By Robt. Chambers. Harper & Brothers.

The world will never tire of studying the character and admiring the writings of the Poet Farmer. Those who are already familiar with the history of BURNS will find enough that is new in this edition to repay a careful perusal. Though often open to criticism and subject to censure, we cannot avoid saying in his own language,

"A man's a man for a' that."

BISHOP BUTLER'S ANALOGY OF RELIGION to the constitution and course of nature, with an analysis by Rev. Robt. Emory, D.D., and a life of the author. By G. R. Crooks. Harper & Brothers: New-York.

This work, which in point of sound logic stands unrivalled, which no study can exhaust and none but the deepest can comprehend, which no sophistry can subvert and no reasoning overthrow, has been published in an accessible form, with valuable additions.

CICERO'S TUSCULAN DISPUTATIONS. By Chas. Anthon, L.L.D. Harper & Brothers: New-York.

Another ably edited volume of classics commends itself to the scholar. Its author and editor need no comment.

A SCHOOL FOR FATHERS—an old English Story, by T. Gwynne. Harper & Brothers.

An English gentleman, with court manners and few brains, attempts to make a fine gentleman and a statesman of his only son, who has passed his boyhood in the country, and has no taste for fashion and etiquette, the event of which is very unfavorable to the father's purposes, resulting in a duel fatal to the son, which adds to the happiness of several other persons.

THE PERSONAL ADVENTURES OF OUR OWN CORRESPONDENT IN ITALY, by M. Burke Honan. Harper & Brothers, New-York.

Reminiscences of travel, in which more of character than local description, appears—more of incident than philosophy—more of private life and manners than political speculation. It is written in the free, hearty spirit of a man who has travelled for his own amusement, and writes a book for the same reason.

THE INSTITUTES OF ALGEBRA. By G. B. Docharty, L.L.D., Prof. of Mathematics in the New-York Free Academy. Harper & Brothers.

This treatise on Algebra proposes to make the science attractive and interesting to the youthful mind, as well as to advance the student as far as the requirements of a college course. Some of the more difficult processes seem to be simplified somewhat, but upon a careful examination, we do not discover anything particularly original or distinctive in the work. The series of DAVIES and that of ROBINSON cover the ground so completely that other works are to a great extent either keys to them or servile imitations of them.

ANNA HAMMER—A Tale of contemporary German Life—translated by A. H. Gurnsey. Harper and Brothers.

This makes No. 173 of Harper's Library of Select Novels, and contains spirited portraitures of German life and character.

THE CLIFFORD FAMILY, a tale of the Old Dominion. By one of her Daughters. Harper & Brothers: New-York.

This is a story written in the olden style, and savors more of the interest we feel in one of the Waverly novels than of the revolutionary style of fictitious writing, which Dickens, Bulwer, and Thackeray have introduced. It is carefully, methodically written, and tells a tale of domestic life, of which the home affections and moral virtues make a large part.

ATLANTIC AND TRANSATLANTIC SKETCHES, Afloat and Ashore—by Capt. Mackinnon, R. N. Harper and Brothers, New-York.

The writer sketches in a graphic, pleasing way, his opinions of our scenery, our customs, our character and destiny, as well as his adventures here and there, in his extensive travels. We must do him the justice to say that he has taken a broader and more just view of this country, than most Englishmen have done, and though he does not penetrate very deeply into the nature of things, he has, on the whole, flattered us considerably.

MEMOIRS OF THE LIFE AND WRITINGS OF DR. CHALMERS, vol. 4, by Rev. Wm. Hanna, L.L.D. Harper & Brothers, New York.

This volume closes the biography of one of the most eminent divines the world has ever produced. In symmetry of character, intellectual strength, oratorical power, and the influence which he exerted on his age, he is seldom surpassed. The present volume is peculiarly interesting, as it contains a full account of the secession of the Church of Scotland, and the controversy in which Dr. Chalmers was involved.

PICTORIAL FIELD BOOK OF THE REVOLUTION, No. 27—BLEAK HOUSE, No. 6.

We acknowledge the reception of the above Nos. of these popular works.

The works of Messrs. Harper are for sale by E. H. Pease & Co., of this city.

FARDOROUGHA, THE MISER. E. Littell & Co: Boston, Mass.

This story of Irish character has appeared in the numbers of Littell's Living Age, and abounds in scenes of thrilling interest. The characters are drawn to the life. Old Fardorougha is as inexorable as Shylock—his money is his god and his life. Conner is a fine specimen of the generous, noble, warm-hearted Irishman, and the gentle Una is quite an ideal woman. The book is well worth the reading.

HOME AND SOCIAL PHILOSOPHY. By Chas. Dickens. G. P. Putnam: New-York.

This is one of the series of Putnam's semi-monthly library, some one of which every traveller must have met. This volume is compiled from Household Words, and like all the series is instructive and entertaining.

NOTES FOR THE MONTH.

Postage on the Cultivator.—By the new law, passed August 30, 1852, and which goes into effect on the first of this month, the postage on The Cultivator is reduced to one uniform rate to any part of the United States, viz: *Six cents a year* to regular subscribers, payable quarterly in advance. The postage on single numbers, (called by the law, "transient matter,") will be one cent per No. if prepaid, or two cents per number if paid where delivered.

The State Fair.—The reader is referred to another page for an account of this Fair, which passed off very greatly to the satisfaction of its managers, and, we believe, to the thousands who attended it. The number in attendance was not as large as at Albany and Rochester. Multitudes were undoubtedly kept at home, by the fear of the Cholera, now so prevalent in several places in western New-York. The receipts were $8,125,41, about the same as at Syracuse in 1849. The income was unquestionably very considerably lessened by a fraud practiced in the exchange and transfer of badges. Six persons were arrested, while engaged in this traffic, and sent to the police office.

To avoid this loss in future, we would suggest an entire change of the rules of admission to the show grounds. We would dispense with all badges, except to the officers and judges, who must necessarily have free access to the grounds at all times, and substitute therefor, the ticket system. By letting all persons enter their articles for exhibition, and drive their teams on to the ground without charge, the necessity for badges will be obviated; and to prevent a rush upon the grounds while the judges are engaged in their examinations, let the charge for admission up to Wednesday night, be twenty-five cents, and on Thursday and Friday one shilling, the same as at present. In this way, as all the tickets would be given up at the gate, all possibility of fraud would be avoided, while no injustice would be done to any one.

Fancy Lop-eared Rabbits.—We are indebted to R. H. Van Rensselaer, Esq., of Morris, Otsego county, for a beautiful pair of these rabbits, from recent importations from London. For portraits and descriptions of these fancy rabbits, see our last vol. p. 176.

Currant Wine.—We have been presented by H. W. Ferry, Esq., of Utica, with a bottle of currant wine, three years old. It is decidedly superior to any we have before tasted. Mr. F. furnished us the recipe by which it was made, which we shall publish in season for another year.

Grapes.—Mr. C. P. Williams, of this city, has sent us a sample of the fine and well grown foreign grapes which he has succeeded in maturing in a "cold house" in this city. He is so well pleased with his success, that he is now erecting a new house, 130 feet in length, for growing grapes. So far, we believe, every one who has undertaken to grow grapes in this way, has found the experiment entirely satisfactory; and we are pleased to hear from so many quarters of the country, that very many are now making preparations to engage in the business. It is clearly proved that with a comparatively trifling expense for a grapery, there is no difficulty in growing an abundant supply of all the most delicious foreign grapes.

Flower Seeds.—Hon. N. Coe, formerly of this state, but for the past two years a resident in Oregon, has sent several parcels of flower seeds gathered from the wild flowers of that territory, for which he will please accept our thanks. We shall give them a trial.

Mr. Vail's Cattle Sale, our readers will remember, is to take place at his farm near Troy, on the 13th of this month. It will be seen by his advertisement, that Mr. Vail proposes to offer his whole stock to the public, reserving only the right to make a first bid on six head. This herd includes several recent importations, and the choice animals reserved from his previous sales, and offers inducements rarely to be met with in this country.

☞ Wm. Bacon, Esq., Richmond, Mass., will please accept our thanks for the Transactions of the Massachusetts Ag. Societies for 1850 and 1851, two handsomely printed and valuable volumes, issued by the state. We have given, in another page a summary of the inferences drawn from a great number of papers, communicated to the Secretary of State in consequence of an offer of $10,000, made by the Legislature of that state, for the discovery of the cause, and a remedy for the disease in the potato. Though we discover nothing particular new in the views of the several writers, the conclusions drawn from their combined statements, will be read with interest.

Patent Ox Yoke—An ox yoke, patented by Mr. John Chase of Craftsbury, Vt., and exhibited by S. E. Beard, received the first premium at the N. Y. State Fair. The bows are so arranged as to slide in the yoke, allowing the cattle to change the position of their necks, to a certain limit, at pleasure. The sliding of one bow toward the middle of the yoke compels the same motion in the other, thus keeping the centre of draught always the same. This effectually prevents the crowding of cattle, for their necks are drawn so near together that it becomes impossible. The practical operation of the yoke is spoken highly of by farmers who have used it. Specimens may be seen in this city at Emery & Co.'s Agricultural Warehouse and at the State Agricultural Rooms.

New Brunswick Ag. Society.—The Journal of this Soc. for 1852, making a pamphlet of 134 pages, has been received. It is filled up with proceedings, addresses before Ag. Societies, prize essays, instructions for farm management, &c.,—forming altogether a creditable and valuable collection of agricultural matter. Considerable attention is being paid to improved farming in New-Brunswick, as the increasing number of subscribers to agricultural papers, and the above report, fully demonstrate.

The Highland and Agricultural Society of Scotland, recently held its 29th Annual Show. It is one of the oldest societies for the improvement of agriculture, in existence, dating its origin back to the year 1784. It held its first show in 1822, when the number of cattle and sheep shown were only sixty-seven, and the premiums offered only seventy-eight pounds. The present year there were exhibited 1,346 animals, and about $4,500 were paid in premiums. The Prize Essays and Transactions of this society possess great value, and Dr. Anderson and Prof. Johnston, both of whom have been connected with the Society, have contributed very much to the progress of Scientific Agriculture.

A Draining Plow.—The Mark Lane Express contains an advertisement and full description of a plow for sinking drains. The work is all done under ground—the ditch excavated and tiles laid invisibly, under your feet. The machine is quite complicated and expensive, but the owners advertise to lay drains better than can be done by hand, at one-third less expense. Could some such machine be introduced into this country, it would turn the attention of farmers to the much neglected, but very important business of draining their land.

A Substitute for Guano.—The Royal Agricultural Society of England offer a prize of £1,000, and the gold medal of the Society, for the discovery of a manure equal in fertilizing properties to the Peruvian Guano, and of which an unlimited supply can be furnished to the English farmer at a rate not exceeding £5 per ton.

Red Ants.—A correspondent wishes to know if any of our readers can tell him how to expel or destroy the small red ants. He can neither drown or scald them out.

Albany and Rensselaer Hort. Society.—The autumnal exhibition of the Albany and Rensselaer Horticultural Society took place on Tuesday and Wednesday, the 13th and 14th ult. The display of fruits, flowers and vegetables exceeded that of any former exhibition. The Society met at 12 m. on Tuesday, its President, Dr. Herman Wendell, in the Chair, who in an appropriate and feeling manner, called the attention of its members to the death of the late A. J. Downing, editor of the Horticulturist, and offered the following resolutions which were unanimously adopted:—

Resolved, That the members of the Albany and Rensselaer Horticultural Society, in common with others of the Pomological, Horticultural and Agricultural portions of our citizens, mourn sincerely the death of the late A. J. Downing, who has been more instrumental, than any other individual, in extending a taste for, and promoting the love of, all the branches of an art which conduces so much to the comfort and the pleasure of the community.

Resolved, That a copy of these resolutions, properly attested, be forwarded to the family of the late Mr. Downing, and that they be embodied in and published with the records of this Society.

The following gentlemen were chosen delegates to represent the Society at the Fair of the American Institute, to be held in New-York, in October:—

Joel Rathbone, V. P. Douw, Herman Wendell, B. P. Johnson, J. McD. McIntyre, B. B. Kirtland, Wm. Newcombe, Erastus Corning, jr., Jefferson Mayell, James Wilson, W. A. Wharton, E. M. Van Alstyne, E. E. Platt and Elisha Dorr.

On motion of Mr. Mayell, it was resolved, that the President communicate to H. T. E. Foster, Esq., of Lakeland farm, Seneca co.; to Messrs. Ellwanger and Barry, of the Mount Hope nurseries, Rochester; to J. J. Thomas, Esq., of Macedon, Wayne co.; to John Morse, Esq., of Cayuga Bridge, and to H. K. Hart, of Whitestown, Oneida co., the thanks of the Society for the rich and valuable displays of fruit made by them respectively.

Old Tan a Remedy for the Potato Disease.—Owing to the prevalence of disease, I am again induced to recommend planting in old tan, which has proved the best and only remedy I have yet met with; and as a proof of my success, I grew nearly 60 bushels on this principle, and scarcely a bad potato was to be found, although planted on heavy clay soil. They were the admiration of all who saw them; while others planted in the same garden without tan were entirely destroyed. As a further proof of the excellence of this remedy, I was resolved last year, by way of experiment, to try them on the same ground without tan, and the result was that nearly half were bad. I write this after three years' experience, which has proved most satisfactory. I usually had the ground thrown up in ridges about November, and I allowed it to remain in that condition until the first week in February, when the sides were chopped slightly down, and about three inches of old tan put in between the rows; the sets were planted whole, and covered with tan and a portion of soil. There is likewise another advantage, viz: when the potatoes are dug, they leave the ground so clean that they require no rubbing, which assists their keeping.—*E. Bennett in London Mark Lane Express.*

Here is another proof of the virtues of *tannic* acid, which have been so harped upon. As a mulch in heavy soils and as a means of retaining moisture, and a covering for tender plants in winter, tan will no doubt be found useful. The effect produced above is unquestionably owing to the soil being kept light and freely permeable to the atmosphere, rather than any constituent of the tan itself.

Effects of Drainage on the Temperature of the Soil.—All the rain that falls upon our fields must either be carried away by *natural* or *artificial* drainage, or, having thoroughly saturated the soil on which it falls, be left upon the surface to be carried off by evaporation. Now, every gallon of water thus carried off by evaporation, requires as much heat as would raise five and a half gallons from the freezing to the boiling point! Without going to extreme cases, the great effects of the heat thus lost upon vegetation cannot fail to be striking, and I have frequently found the soil of a field well drained, higher in temperature from 10° to 15° than that of another field which had not been drained, though in every other respect the soils were similar. I have observed the effects of this on the growing crops, and I have seen not only a much inferior crop on the undrained field, but that crop harvested fully three weeks after the other, and owing to this circumstance and the setting in of unsettled weather, I have seen that crop deteriorated fully ten per cent in value. *B. Simpson, in Journal of Royal Ag. Society.*

A Card from Mr. McCormick.

Mr. Editor—I beg leave to say through the forthcoming No. of the "Cultivator," that it may appear with your notice of the *awards* of the Committee of the State Agricultural Society, made at the *Geneva* trial of Reapers and Mowers—that in the *detailed report* of facts made by said committee, together with some other *facts* known to them—but especially in connection with certain other facts, perhaps not within their knowledge—the superiority of my machine over all others included in said trial, was abundantly *proved*—the *awards* of the committee to the contrary notwithstanding. When I say this, I mean not to impugn motives. I was not present either at the Geneva trial, or the Utica Fair, and the public are only concerned to know facts and results. Such only I propose to present, and such I ask them to consider; and, accordingly, I only request them to suspend any judgment in the premises until I have seen and commented upon the report and awards together, which I consider calculated to do the grossest injustice to myself and the public.

I will only at present add, that when it was made known to the committee that the machine which I had provided for the Geneva trial, from being delayed on the way from Chicago, did not arrive in time for the trial, and in consequence of which an ordinary one had to be taken—which might not have been an average working machine, and which *same machine* I supposed would be *required at Utica*—I regret that, while the *workmanship* in it, as I understand, was made a ground of objection, the *explanation* was not given. I also regret, that, while at the firstt rial of *mowers*, the teeth of the sickle were raked off by the *stones on the surface of the ground* as fast as the sickles could be put in place, for an obvious reason [explained to the committee, as I understand]—the "fingers," or guards to the sickle edge being so wide apart as to let the stones to the edge, while *others* were closer together—and mine will be hereafter—not having, myself, previously thought of cutting grass on stony ground, as that was—I regret, I say, that some explanation of this had not been made by the committee, instead of charging all to the fragile construction of the machine!

With the expression of one other *regret* at this time, I conclude; and that is, that the committee, like your *reporter*, did not, as they at one time proposed to do, enlighten the public as to the character or claims to novelty and utility, of the several machines exhibited—*which might, in some cases, have prevented imposition upon the public.* Very respectfully your obedient serv't. C. H. McCORMICK.

P. S.—Since the foregoing was written, I have been informed that a member of the said committee who attended the *trial at Geneva*, and was prevented by sickness from attending the *Utica Fair*, (where the awards were made up,) was "surprised" at the awards made, and was decidedly of the opinion that my Reaper was entitled to the first premium. But more anon. C. H. McC.

New-York, Sept., 28, 1852. Oct. 1—1t

Certificate.

We, the undersigned, certify that we have sold to Mr. S. W. Jewett, of Vermont, America, of pure blood Merino Ewes, of our own raising, much more in number, and for a much greater value in money, than to all other American purchasers.

GUERIN,
CUGNOT,
VICTOR GILBERT.

Poissy, France, April 7, 1852.

WM. R. PRINCE & CO., refer to their advertisement in the September No, and desire simply to add that they will sell off their great stock of Trees. &c., only at private sale; and such Nurserymen and others as may desire a long credit, will be fully accommodated if the payment is made sure with interest. Approved notes and mortgages will be taken in payment.

Linnæan Garden and Nurseries, Flushing, N. Y., Oct 1—1t.

Trees, Plants and Shrubs

SHOULD be transplanted South in the fall. Orders supplied from the best nurseries, at their prices. A. B. ALLEN & CO.,

Oct. 1, 1852—tf. 189 and 191 Water st., New-York.

Fruit and Ornamental Trees.

THE subscribers would beg leave to give notice to dealers and others purchasing Pear Trees, that their stock is remarkably well grown this season, and will be very strong and fine for the fall sales, and is as extensive a collection of saleable trees as can be found at any other nursery in the county. The collection grown on quince stock is also very fine.

The stock of Apple Trees will also be very large this fall, in lots to suit purchasers.

Plums—a general assortment of most of the leading kinds.

Cherries, Apricots, Peaches, Grapevines, Gooseberries, Currants, with other small Fruits, at the lowest market prices.

Ornamental Trees, being also grown extensively, can be furnished by the hundred at very reasonable rates—European Linden, Mountain Ash, Scotch Elms, English Elms, Horse Chestnuts. with a good collection of Roses, &c. Catalogues will be forwarded to all applicants.

WILSON, THORBURN & TELLER,
Oct. 1—2t. Nurserymen, No. 492 Broadway, Albany.

Cranberry Vines.

THE variety cultivated mostly in New-England are hardy and prolific.

They can be raised on upland, on rather moist loam—but do the best on low, damp or moist *meadow land*, with a little sand put around the plant.

They may be planted out 1½ to 2 feet apart, each way.

Two feet apart, it will take 10.000 plants to the acre; if on low ground, it should be pared, plowed, or burnt over, to take out the grass or weeds. and cultivated for one or two years, until they cover the ground. The yield after that is from 150 to 250 bushels per acre.

Also, all kinds of Trees, Plants, &c. For sale by F. TROWBRIDGE. New-Haven, Conn. Oct. 1, 1852—1t.

For Sale.

ONE of the most desirable farms in the Chenango Valley, 2 miles from the village of Oxford, containing 220 acres—river flat—grain land. pasture. woodland. and orcharding. A large and convenient dwelling house, two large sheds and out-houses—watered by the Chenango River—a creek on which there is a saw mill, and by never failing springs. On it are more than 700 rods of stone wall. Persons wishing to purchase are desired to look at the crops and stock on the farm. Enquire of JOHN TRACY, Oxford, N. Y.

Oct. 1, 1852—3t.

SENECA LAKE HIGHLAND NURSERIES,

Catharine, Chemung County, N. Y.

ALL applicants by mail will be furnished gratis, with a general Descriptive and Price Catalogue of this extensive establishment.

Packages amounting to $10, will be forwarded to New-York or Dunkirk, or any intermeiate station on the New-York and Erie Railroad, free of charge to purchasers.

My extensive trade with Eastern, Southern, and Western planters and dealers, has induced me to perfect this arrangement.

With seedlings of other fruits. 75 thousand Cherry stocks can be furnished. E. C. FROST.

Oct. 1, 1852—1t.

ANDRE LEROY, Nurseryman at Angers, France,

HONORARY and Corresponding member of the principal Horticultural Societies of the United States, and of Europe, begs leave to inform his friends, and all the nurserymen of the Union in general, that he has made large preparations, and has now on hand a considerable stock of all the finest Evergreen Seedlings, Roses, Fruit and Ornamental Trees, &c., &c.. most suitable for the American markets. The experience of several years of putting up large orders for the United States, enables him to flatter himself that he has now all the necessary knowledge to give full satisfaction, and to assure the delivery in good order, of all the trees, &c., ordered.

He also begs to inform all nurserymen who have not already recived the Supplement for 1852. to his Catalouge of 1851, that it can be obtained free of any charge, at his agent's office, M. Ed. Bossange, 138 Pearl-Street, New-York, who will also attend to forward all orders sent to him, and to pass through the custom house, and to reship all goods ordered, without any delay, and with the greatest care.

Address M. ANDRE LEROY. Angers, France,
Care of M. Ed. Bossange, 138 Pearl-Street, N. Y. Oct. 1—3t

S. MOULSON, Old Rochester Nursery,

Office 36 Front-St. Rochester, N. Y.

20,000 Northern Spy Apple trees, 6 to 8 feet high, *transplanted*, at 37½ cents each, or $25 per 100.
50,000 most popular varieties of Apple, at 25 cents each, or $18 per 100.
1,000 Dwarf Apple, at 37½ cents each.
60,000 Dwarf Pear, at 50 cents each.
20,000 Standard Pear, at 50 cents each.
20,000 Standard and Dwarf Cherry, at 50 cents each.
10,000 Giant Rhubarb, at 25 cents each—$2 per dozen, or $60 per 1,000, best variety for market gardens.

Also a large assortment of Apricot, Peach, Nectarine, Strawberries, various sorts of Nuts, &c., &c.

50,000 Osage Orange for hedges, at $10 per thousand, or $6 for 500. Hedge plants in great variety.
50,000 Norway Spruces 2 years old, at $5 per 100.
20,000 do 3 do $10 to 12 per 100.
20,000 Mountain Ash, 2 years old—seedling at $20 per 1000 or $12 for 500.

Bulbous flowering roots of various sorts, together with a large assortment of hardy items, comprising everything requisite for open ground culture in this climate.

Lists of leading items forwarded to post-paid applicants enclosing a one cent postage stamp for under 500 miles, and two cents for over.

Packing done in the best manner.

Orders solicited by mail or otherwise. Oct. 1—1t.

FOR SALE.

A FEW Buck Lambs, from a French Merino Buck, imported by J. A. Taintor, and out of full blooded American Merino Ewes. These Ewes dropped their Lambs in Feb. and March, and sheared 4 lbs. 13½ oz. per head, of clean washed wool, which we sold last year for 41½ cents per lb. These lambs are well formed, and weigh from 85 to 100 lbs. To wool growers who wish to grow a fine grade and heavy fleece, we would invite them to give us a call.

L. & A. WHITING,
Oct. 1—1t. Torrington, Litchfield County, Ct.

CONICAL MILL.

IMPORTANT TO FARMERS.—Oaklands, near Geneva, 28th August, 1852. Mr. Chas. Ross—Dear Sir: In reply to your letter of the 25th instant, it is a pleasure to speaki n commendation of your Patent Conical Mill. to me it has proved valuable for grinding food for my stock, as a few hours labor with this machine, prepares food sufficient for fifteen head of cows for several days.

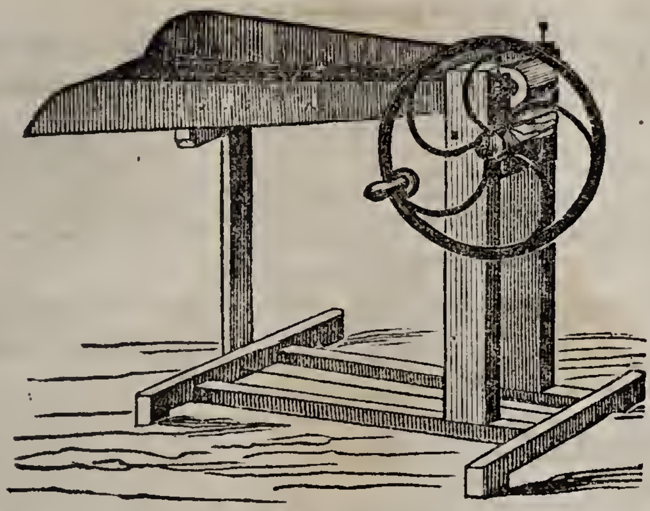
The Mill used by me prepares food for horses, sheep, and swine, grinding, and mixing corn, oats, and other grain satisfactory. It has also produced for my family use, our Indian meal, buckwheat meal, and occasionally wheat flour, thus saving the time of teams and men which otherwise must have been occupied, going several miles to a distant mill, at much expense—it is therefore a source of economy, as well as an inducement to a better care of all stock—it affords, also, one among other resources for convenient and useful labor during stormy weather—my belief is that your mill will work its way into general use upon farms where stock is raised, and where grist mills are not within a short distance.

In my estimation, this mill is among the most important machines offered to the farmer. Respectfully yours, J. DELAFIELD.

N. B.—The Conical Mill has been in use by Mr. Delafield on his farm, for nearly four years.

Any further information relative to the Conical Mill, can be obtained by letter, post paid, or by calling at the factory of

CHARLES ROSS,
2d story, Phœnix Building, Acqueduct Street, nearly opposite the Arcade, Rochester. Oct. 1, 1852—1t.



Patent Spiral Hay, Straw and Corn Stalk Cutter.

THE attention of the public is respectfully called to our

NEW SERIES
HAY, STRAW, AND STALK CUTTERS,
WITH ADJUSTABLE SPIRAL KNIVES.

Having long been engaged in the manufacture and sale of Hay and Straw Cutters, of various kinds, we claim to have had experience sufficient to warrant us in asserting it as a fact, that the spiral form for knives, upon a cylinder for cutting by pressure upon a roller, are the only proper form, and the only kind of cylinder cutter built upon philosophical or mechanical principles—not only in theory but in practice, while they are the most simple, most easily adjusted and easiest operating machine; their capacity and strength is much greater in proportion to their weight and cost, than any cylinder cutter without the spiral knives, and as now made by us in our

"NEW SERIES,"

the knives are adjustable and readily taken out if necessary, and ground and regulated separately; which gives them a decided advantage over most other kinds in market.

The recent improvement in the construction of this knife cylinder which instead of being made with flanges is simply the flanges themselves, sitting quite to the center of the axis and admitting the knives to the bottom—thus forming the knife cylinder of a diameter equal to the width of two knives only—thereby lessening the circumference and distances between the edges of the blades in proportion, and enabling our new cutter with six blades to cut as short as the old kinds with 12 blades—thus forming an angle between the blades of our improved cutter with six knives of 60°, while in the old series, with 12 blades the angle is only 30°, which, in cutting any kind of substance, makes our new cutter the easiest operating and always cleaning itself, while the old patterns with the small angle will frequently clog, and never would cut hard or damp substances with ease.

The following extracts are from the report of the Judging Committee, on NEW INVENTIONS AND MACHINERY, of the Worcester County Mass. Mechanic's Association, at their fair in September, 1851, on this late improvement in knife cylinders of Wm. Hovey's.

"By a new mechanical arrangement, he has reduced the diameter
" of his cylinder and increased the twist of his knives, by which ar-
" rangement the power required to operate the machine is much re-
" duced and a less number of knives are required to cut feed of equal
" length of those previously made. The committee, therefore, are of
" opinion that this improvement on this cylinder of knives will be of
" more importance to the public than anything which has been made
" since its first application to cutting on a roller."

As most other manuracturers have followed each other's numbers and prices in their lists, without regard to the size of each other's machines, their capacity, number and length of knives or other parts; and as our new series differ in every essential point it becomes necessary to adopt a distinct series of marks or numbers, and at the same time assure our patrons that every cutter in the "new series" of numbers, when compared by prices, will be found of from thirty to fifty per cent greater capacity than those of like prices of other manufactures; to say nothing of the adjustable arrangement of the knives. These Cutters need only to be seen side by side of our old patterns, and those of other makers, to be at once adopted

Beside the above improved adjustable cutters, we have the Common Spiral Hay Cutters of our own manufacture, and warrented of the best materials and wormanship which are offered as low and is possible, and leaving a paying margin. For several years the competition in this kind of cutter, has been so great that their manufacture has been improfitable even if a paying business and several large manufactures have abandoned them and turned their attention to the manufacture of the straight knife sett diagonally upon the cylinder, and by lessening their cost and capacity while the same marks and numbers of the others are retained, they are enabled to make better terms and profits on them, the result of which has been a very extensive sale in some sections of the country. They claim for them the advantage of being more easily kept in order by the farmers themselves, than the spiral knife. Notwithstanding, we have them constantly on hand for the trade, on as good terms as any other dealers, we will say that so far as keeping the two kinds in order, the spiral knife will not require half as often grinding as the straight knife, and which is, on an average, once in three years, and any machinest can grind and regulate either kind for fifty cents, while a farmer cannot regulate the straight knife at all, owing to its construction, thus proving conclusively our adjustable Spiral Knife Cutter superior to all others.

By examining closely this list and comparing the length of the knives, and the length of the cut feed, with the prices of other Cylinder Cutters, without regard to the marks and numbers on the machines, it will be seen that our New Series of Cutters are from 30 to 50 *per cent greater capacity, and less in price, than any other Cutter in market.*

In the table of Old Series, the numbers, prices, and sizes correspond with those of all other makers of straight and spiral cutters.

NEW SERIES.
Adjustable Spiral Knife Cylinder Hay Cutter.

Sizes.	Length of blades and Cylinder.	Length of Straw cut.	Prices at retail.
No. 10	5¾ inches.	1¼ inches.	$6 50
15	5¾ do	1 do	7 50
20	6¼ do	1¼ do	8 50
25	6¼ do	1 do	9 00
30	7¼ do	1¼ do	10 50
35	7¼ do	1 do	11 50
40	8¼ do	1¼ do	13 00
45	8¼ do	1 do	14 00
50	9¼ do	1¼ do	16 00
55	9¼ do	1 do	17 50
60	10¼ do	1¼ do	20 00
65	10¼ do	1 do	22 00
70	11¼ do	1¼ do	25 00
75	11¼ do	1 do	27 50
80	12¼ do	1¼ do	30 00

All of New Series fitted for horse power.

OLD SERIES.
Spiral and Straight Knife Cylinder Hay Cutter.

Sizes.	Length of blades and Cylinders.	Length of Straw cut.	Prices at retail.
0	5¾ inches.	1¾ inches.	$7 00
1	5¾ do	1¾ do	8 00
2	5¾ do	1¼ do	9 00
3	6¾ do	1½ do	10 00
4	6¾ do	1¼ do	11 00
5	6¾ do	1 do	12 00
6	7½ do	1¾ do	14 00
7	7½ do	1¼ do	15 00
8	7½ do	1 do	16 00
9	8½ do	1¾ do	17 00
10	8½ do	1½ do	18 00
11	8½ do	1 do	19 00
12	9½ do	1¾ do	22 00
13	9½ do	1¼ do	24 00
14	9½ do	1⅛ do	26 00

Nos. 12, 13, and 14, are fitted for horse power.

For further particulars consult our Illustrated Catalogue, or address

EMERY & CO., Albany Agricultural Works,
Warehouse and Seed Store, 369 & 371 Broadway, Albany, N. Y.

Straw Cutters! Straw Cutters!

A LARGE assortment of the best makes, viz: Forbes & Dones', Stevens', Clintons', Hovey & Co., and Hovey & Lazell's; Stalk Cutter's of Bentholf's, Sinclair and Bott's patent, at manufacturer's prices. State Agricultural Warehouse.

Sept. 1—2t. LONGETT & GRIFFING, No. 25 Cliff Street.

A First Class Dairy Farm for Sale.

MY farm of 320 acres, four miles south of the village of Oxford, Chenango county, N. Y., and near the Chenango Canal. 250 acres are under high cultivation, durably fenced, and well and permanently watered. The remainder is well timbered. It has a large two story mansion, five large barns, and sheds and out houses, in good repair. The soil is deep and of superior quality. It is admirably adapted for a dairy, or for grazing and grain; has a fine orchard of choice grafted fruit; and for profit, health, and beauty of location, cannot be surpassed. It is fully supplied with farming tools, and about fifty head of cows and young stock, all or any of which may be had with the farm. The New-York and Erie Railroad furnishes ample facilities for forwarding produce to the New-York market at all seasons, and the route of the contemplated Albany and Binghampton railway, passes within a few miles of the farm. The farm can be conveniently divided. Price low—title perfect. Terms most easy.

G. VAN DER LYN,
Oxford, N. Y.

May 1, 1852—tf.

Agricultural Books

OF all kinds, for sale at the Cultivator Office, 395 Broadway, Albany.

United States Agricultural Warehouse and Seed Store,

No. 197 Water Street, New-York.

THE subscribers solicit the attention of the public to the large and varied assortment of Agricultural and Horticultural Implements, Field and Garden Seeds which they have constantly on hand, and offer for sale at the lowest prices and on the best terms.

Aug. 1—tf. JOHN MAYHER & CO.

Hay and Straw Cutters,

OF all styles and sizes, for cutting Hay, Straw, or Cornstalks; for sale at the United States Agricultural Warehouse and Seed Store, No. 197 Water Street, N. Y. JOHN MAYHER & CO.

Sept. 1—tf.

Seed Wheat.

GOLDEN Australian, Mediterranean, White Flint, Canada, Black Sea, Soul's, in bags or barrels. For sale at the United States Agricultural Warehouse and Seed Store, No. 197 Water Street, New-York. JOHN MAYHER & CO.

Sept. 1—tf.

Super Phosphate of Lime,

FOR farming purposes, put up in bags of 150 lbs. each. For sale by JOHN MAYHER & CO.

Sept. 1—tf. No. 197 Water Street, New-York.

Great Sale of Superior thorough-bred Short-Horn Cattle.

THE subscriber will offer for sale, his entire herd of choice Short-horns, comprising 50 head, young and old, at public Auction, on Wednesday the 13th of October, 1852, at 1 o'clock, P. M., at his farm 2½ miles from the city of Troy; reserving to himself one bid on five Cows and Heifers and one Bull, say six head in all, and these to be pointed out previous to the commencement of the sale; this bid will be made public when the six animals are brought to the stand for sale. Should any gentlemen advance on the single bid made by the proprietor, the highest bidder will be entitled to the animal. It is proper to say, the severe drouth in this vicinity reducing the hay crop one half, has decided the proprietor to make this sale at the time named, instead of next June, which he had purposed to do.

The well established reputation of this herd in this Union, and in Canada, and the splended herd it has measurably sprung from, viz: the famed herd of that eminently English breeder the late Thomas Bates, Esq., renders it hardly necessary to comment upon its superior merits. It may not, however, be inappropriate to remark, that the establishment of this herd was commenced in 1838, and that the most careful attention has since been paid to its breeding, and that it now contains mostly all the reserved stock of two former public sales. And besides these he has now on the passage across the Atlantic, shipped 21st June, on board the Packet Ship Kossuth, Capt. Jas. B. Bell, a superior yearling roan Bull, having many crosses of the famed Duchess Bulls of Mr. Bates. Including this latter animal and the two beautiful red roan three year old Heifers, which came out from England last September, "Yarm Lass" and "Yorkshire Countess," and the beautiful Heifer Calf of the latter animal, got in England by the Duchess Bull 5th Duke of York, there will be 14 head of this imported stock, and its immediate descendants. There has been sold from this herd but three Heifers from these importations, and these cows were sold at $300 each. All the young bulls bred from these cows, except those now offered for sale, have also been sold at private sale, at $300 each, most of them while quite young.

Besides these 14 head of high bred animals, the noble premium cow Esterville 3d, bred by E. P. Prentice, Esq., of Albany, and the equally fine two year old, red and white Heifer bred by me, got by the Bates Bull Meteor, and three of the famed milking Willey tribe, the same tribe of cows as the Heifer Ruby, sold by me to Mr. S. P. Chapman of Madison county, and which cow was awarded the first premium by the N. Y. State Agricultural Society, for producing the largest quantity of butter in 10 days in June, and 10 days in August, on grass pasture only, being a fraction over 40 lbs. in those 20 days. There are other valuable tribes in the herd, as the printed Catalogue will show.

The catalogue will be ready for distribution about the 1st of August, and will exhibit richness of pedigree rarely to be met with, showing the descent of most of the animals, from the best animals on record in the English herd book. Having received an invitation from H. Strafford last winter to forward a list of the pedigrees of my herd to be inserted in the forthcoming volumes of the English herd book, of which Mr. Strafford is now the editor, several pedigrees were sent to him of the animals here offered for sale, and will appear in said book.

A credit of 9 months will be given on all sums up to $300, and 9 and 18 months on all sums over $300, for approved paper, with interest, payable at some bank in this State. GEO. VAIL.

Troy, N. Y., Aug. 1—3t.

Valuable Farm for Sale.

THE subscriber offers for sale four hundred and fifty acres of land, being a part of his homestead, and comprising two hundred acres of as desirable land as any in Addison county—lying on the main road four miles north of Vergennes on the border of Lake Champlain, and one mile from the Railroad Station. It is under good cultivation, and furnished with commodious buildings. The remaining 250 acres is wood land; a portion of it covered with a heavy growth of hemlock and other valuable timber, and the remainder with the best quality of wood for fuel. The property will be sold together or in parcels. Postpaid inquiries promptly responded to.

ROW'D T. ROBINSON,
Aug. 1—tf. Ferrisburgh, Addison co., Vt.

Improved Stock.

CATTLE, of the Durham, Devon, Hereford, Alderney, and Ayrshire breeds.

SHEEP, of the Native and French Merino, Saxony, South-Down, and Cotswold.

PIGS of the Lincoln, Suffolk, and Berkshire breeds.

From our long experience as breeders and dealers in the above kinds of stock, and our excellent situation for purchasing and shipping, we think we can do as good justice to orders, as any other house in the United States. A. B. ALLEN & CO.,

Jan. 1, 1852—tf. 189 and 191 Water st., New-York.

POUDRETTE,

FOR Grass Lands, Lawns, and Winter Grain, also for shrubs—for sale by the Lodi Manufacturing Company, in lots to suit purchasers. Price $1.50 per barrel, for any quantity over six barrels. For *Shrubs*, $2 per barrel.

☞ The Company will sell lots of 100 barrels or over, at a reduced rate this fall, as they are making extensive alterations in their buildings, which will compel them to empty their vats. For particulars address "The Lodi Manufacturing Company," 74 Cortlandt Street, New-York. Sept. 1—2t.

EMERY & CO.'s

Improved Horse Power, Thrashers and Separators.

THE undersigned have been appointed sole agents for the sale of Emery's new patent Improved Horse Power, Thrashers and Separators in the city of New-York. The State Agricultural Warehouse is the only Depot where this superior power can be had. As many powers are represented as Emery's patent, to avoid impositions, be careful to observe that the name of Emery & Co., is cast in full on every link of chain and the wheel hub.

LONGETT & GRIFFING.
July 1—tf. 25 Cliff street, New-York.

FOR SALE,

50 EWES and a few Bucks from my flock, the wool of which has sold, for the last three years, for forty-seven cents a pound, and averaged from three and one half to three and three-fourth pounds per head.

For further particulars, address the subscriber at his residence, Canaan Centre, Columbia county, N. Y., or BLANCHARD and BURT of the Wool Depot, Kinderhook. DANIEL S. CURTIS.

Canaan Centre, Aug. 1, 1852—tf.

WATER WHEELS.

THE subscribers are making with success, Jagger's improved FRENCH TURBINE WATER WHEEL.

Tables showing the power and capacity of the same can be had on application. JAGGER, TREADWELL & PERRY,
Eagle Foundry and Machine Shop,
May 1, 1852—6t. No. 110 Beaver st., Albany, N. Y.

STOVES.

THE subscribers are prepared to furnish dealers with a full assortment of PARLOR and COOKING STOVES for coal and wood, on liberal terms.

Circulars giving particulars can be had on application.

JAGGER, TREADWELL & PERRY,
Eagle Foundry, No. 110 Beaver st., Albany, N. Y.
May 1, 1852—6t.

Albany Drain Tile Works.

No 60 Lancaster Street—West of Medical College, Albany.

THE subscriber has now on hand, Draining Tile of the following descriptions. Prices reduced.

HORSE SHOE TILE.

5½ inch Rise,	or 4½ inch Calibre,	$18 00 pr. 1000.
4½ "	" 3½ "	15 00 "
3½ "	" 2¾ "	12 00 "

SOLE TILE.

4½ inch Rise,	or 3½ inch Calibre,	$18 00 pr. 1000.
3½ "	" 2¾ "	12 00 "

These Tile are over one foot in length, and are so formed as to admit water at every joint, draining land from 12 to 20 feet each side of the drain—being the cheapest and most durable article used.

Tile sufficiently large for drains around dwellings, at $4 and $8 pr. 100 pieces. Orders from a distance will receive prompt attention.

Albany, April 1, 1852—tf. JOHN GOTT.

New and Important Insurance.

Northern N. York Live Stock Ins. Co., Plattsburgh, N. Y.

INCORPORATED by the Legislature of the State of New-York, July, 1851. Horses, Cattle, and all kinds of Live Stock insured against Death, by the combined risks of Fire, Water, Accidents, Diseases, &c. CAPITAL, $50,000.

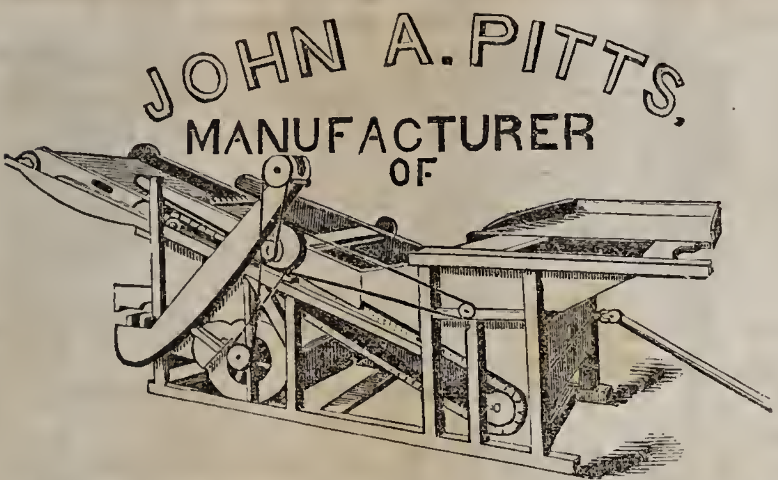
GEORGE MOORE, Plattsburgh, Sec'y.
I. C. MIX, Fort Ann, Gen. Agent.

October 13, 1851.

This company are now organized and ready to receive applications for insurance. It is confidently believed that the owners of valuable animals will avail themselves of the advantages offered by this mode of protection. If fire, life and marine insurances are proper and expedient, so is live stock insurance: the reasons for insurance are equally applicable to all.

For terms please apply to Company's Agents.

Plattsburgh, July 1—tf.



PITTS' PATENT SEPARATOR
AND
DOUBLE PINION HORSE POWER.

OWING to the increased demand, and being desirous of locating at a convenient point for shipping, I have removed to Buffalo, N. Y., and have erected a large establishment for the purpose of manufacturing the above celebrated Machines, for threshing and cleaning grain at one operation.

This is the same Machine that has stood, and now stands, unsurpassed by any Machine in existence for the above purpose. It has been exhibited at nearly all the State and County Agricultural Fairs throughout the United States, and always received the *first premium.*

The Machine has recently been much improved, enlarged, and rendered more substantial in all its parts. I therefore offer it to Farmers of the different wheat growing districts, to be all I claim for it, viz. *the best Machine* for threshing and cleaning grain, now in existence.

I also manufacture Pitt's Improved Endless Chain Two Horse Power and Separator—also Pitt's Corn and Cob Mill, for grinding feed for stock.

My Horse Powers and Separators are all warranted to be a better article than can be purchased at any other shop—and if they do not, on trial, prove to be so, I will take them off the hands of the purchasers at the price they may pay me for them.

P. S.—The Patent Right on the Separator has recently been extended for a further term of seven years, and all *infringements* on *said right* will be dealt with according to law.

JOHN A. PITTS.

Buffalo. N. Y., July 1, 1852—4t.

Balsam Firs, Arbor Vitæ, and other Forest Trees.

HENRY LITTLE & CO., of Bangor, Maine, will furnish any number of Evergreen and other Forest Trees, taken up with *earth on the roots*, with the greatest care, and sent to any part of the United States by Steamers or Railroad—and carefully packed in large boxes, at short notice, at the following prices, viz:

From 6 inches to 1 foot, at 1 cent, or $10 per 1000.
From 1 foot to 2 feet, at 1½ cents, or $15 per 1000.

The above prices refer more particularly to Balsam Fir and Arbor Vitæ Trees.

We charge what the boxes cost, but nothing for packing.

For three years past, the trees we have procured and sent to a distance, have lived generally, and have given good satisfaction. Evergreens will not live unless taken up with great care.

Bangor, Sept. 1, 1852—2t.

SYRACUSE NURSERIES.

Thorp, Smith, Hanchett & Co., Proprietors, Syracuse, N. Y.

OUR Nursery grounds, amongst the largest and most extensive in the country, are now covered with a most beautiful stock of fruit and ornamental trees, shrubbery, roses, greenhouse plants, &c. We therefore invite particular attention to our stock of trees, which cannot be excelled in size, thriftiness and beauty, by those of any other establishment in the Union. *Nurserymen, Amateurs, Orchardists, and Venders*, are earnestly invited to call, examine, and judge for themselves.

Apples.—We have a very extensive assortment of all the best varieties in cultivation, both Dwarf and Standard.

Pears.—Our stock of Standards and Dwarfs is much better than heretofore, and we invite competition, as no finer can be produced. We have also, a few hundred Dwarfs, five years old, filled with fruit spurs, and which have borne freely the past two years, (now with a full crop,) that we will supply to those persons desiring fine fruit bearing trees.

Cherries.—Both Standard and Dwarf of all the newest and finest sorts, that cannot be excelled for beauty and thriftiness.

Plums, Peaches, Apricots, Nectarines, Currants, including *Victoria* and *Cherry*, and *English Gooseberries* of all the best leading sorts.

Our Ornamental Trees are of fine form and luxuriant growth and require only to be seen, to be admired.

Evergreens.—A fine assortment of Norway and Balsam Firs, Spruce, &c.

Pæonies.—A splendid collection of both tree and herbaceous varieties.

Dahlias.—Over 150 choice selected kinds, 25 cts. per whole roots

Roses —One of the largest stocks in the country, of all the leading varieties, being about 10.000 plants.

Bulbous Roots.—A splendid collection just imported from Holland, of best double Hyacinths, Tulips, Crocus, &c. &c.

Greenhouse Plants.—A large collection of the choicest and newest kinds, including the *new Heliotropes, Reptans de Santana, Erringii, Hoyas Bidwelliana, Imperialis and Bella*, &c.

Fuschias in 50 varieties, including *Spectabilis, Eliza Melliez, Sir John Fastolff, Serratifolia, Prince of Orange, Pearl of England, Caroline*, &c.

Chrysanthemums.—A full assortment of all the best standard kinds in the country. Of the new Dwarf and Daisy varieties we have every thing new and rare, including 30 of the very best sorts.

Verbenas.—A splendid collection of 50 varieties including Hovey's New Seedling.

Strawberries.—All the best varieties including the three new Cincinnati sorts, one of which took the $100 premium.

Hedge Plants —Buckthorns, Privet, Red Cedar and Osage Orange

Seedling Stocks.—Nurserymen and others can be supplied with Apple, Pear, French Quince, Mahaleb, Doucain, and Paradise stocks by giving us notice in due time. The *fall* is the best time to ship trees to the South and West.

Our Catalogues, with full descriptions and prices, will be forwarded to every post-paid applicant, enclosing one letter stamp if under 500 miles and three stamps if over that distance.

Sept. 1—2t. THORP, SMITH, HANCHETT & CO.

Horse Powers, Threshers and Separators.

Endless Chain Powers

OF all kinds ever made, for one and two horses, also cast iron Sweep Powers, for one to four horses. Threshers and Separators to match the above. JOHN MAYHER & CO.,

United States Agricultural Warehouse and Seed Store,
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Fruit and Ornamental Trees.

River Bank Nursery, Rochester, N. Y.

SHEPPARD & CHERRY, Proprietors,

NOW offer to furnish Nursery stock generally, of as good quality and at as low rates, as can be obtained elsewhere.

FRUITS.—All the leading varieties, both standard and dwarf, of Apple, Cherry, Peach, Pear, Plum, &c., &c. Gooseberries, Currants, Raspberries, Strawberries, &c. Grapes—Isabella, Catawba, Clinton, &c., &c.

Also 100,000 Apple Stocks.
20,000 Cherry do root pruned.

All orders accompanied with the cash or satisfactory reference, and all letters of inquiry post-paid, will receive prompt attention.

From the connection of Mr. Sheppard for a number of years, with the following establishments, all of which sustain the highest reputation, viz: A. J. Downing & A. Saul, Newburgh, N. Y.; Wm. Reid, Elizabethtown, N. J, and Ellwanger & Barry, Rochester, N. Y., the proprietors flatter themselves that their knowledge of the great variety of tastes and wants of planters generally, will enable them to guarantee ample satisfaction to all favoring them with their patronage.

Rochester, Sept. 1, 1852—2t.

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ENCOURAGED by the generous patronage heretofore received, and by a soil, climate, and position peculiarly favorable to the growth of *healthy* trees, we have so enlarged our stock of nursery articles, that we are now enabled to offer great inducements to all who may wish to purchase, either at wholesale or retail. We have between *five and eight hundred thousand* trees, in the different stages of growth, which have been propagated with the strictest care as to merit and genuineness of varieties.

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60,000 *Apple Trees*, best varieties for market or family orchards.
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6.000 *Pear* do standards—healthy and large.
20,000 do do dwarfs, on True Angers quince—one and two years old.
10.000 *Peach* do very nice.
4,000 *Plum* do 5 to 7 feet high—best sorts.
2,000 *Apricot* do mostly Dubois' Early Golden.
2,000 *Grape Vines*, mostly Isabella.
10,000 *Evergreens.* Balsam Fir. Cedars, Norway Spruce, &c.
5,000 *Mountain Ash*, large and fine—*very cheap.*
3.000 *Horse Chestnut*, large and handsome.
40,000 *Cherry Seedlings*, very nice.
20,000 *Apple* do two years old.
25.000 *Buckthorn Seedlings*, very nice for hedges.

Also Hybrid Perpetual, Climbing, and Moss Roses, Shrubs, Gooseberries. Currants, Raspberries, Strawberries, &c., &c.

Particular attention is called to our large stock of the following fruits, viz:

Apples—Wagner, Tompkins County King, Northern Spy, Primate.
Pears—Virgalien. Bartlett Louise Bon de Jersey, Glout Morceau.
Cherries—Great Bigarreau, Black Tartarian, Bauman's May, Early Purple Guigne.
Apricots—Dubois' Early Golden, Moorpark.

Geneva, Sept. 1, 1852—2t.

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THE GENUINE ARTICLE, manufactured by Professor Mapes, also C. Deburg's No. 1—with printed directions for their use, in bags of 150 pounds each. Farmers and Gardeners will do well to apply to us, as we keep none but the *genuine unadulterated* article.

A. B. ALLEN & CO., 189 and 191,
Water-st., New-York.

Oct. 1—tf.

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Macedon, Wayne County, N. Y.

ALL Fruit Trees sold at this Nursery are propagated from trees proved in bearing, and a selection of the best sorts made out of nearly *one thousand* proved varieties.

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GRAPES—Isabella, Catawba, York Maderia, Clinton, Bland, Black Cluster, Malvoisie, Royal Muscadine, Black Hamburgh, &c.

RASPBERRIES—Franconia, Fastolff, Cretan, Red Antwerp, etc.

STRAWBERRIES—Burr's New Pine, Hovey's Boston Pine, Large Scarlet Hudson, &c.

GOOSEBERRIES—Houghton's and many English sorts.

ORNAMENTAL TREES—Horsechestnuts, European Larch, Mountain Ash, Honey Locust, Weeping Ash, Ailanthus, Magnolia, &c.

EVERGREENS—Balsam, White Spruce, Deodar, Norway Fir, Silver Fir, &c.

ORNAMENTAL SHRUBS—Deutzia, Fringe tree, (white and purple,) Japan Quince, Dwarf Almond, Dwarf Horsechestnuts, Siderian Lilac, Crimson Currant, Tree Pæonia. Large flowering Philadelphus, Mezereon, Sweet-Scented Shrubs, &c. Spiræas—racemosa, double flowered prunifolia, and a dozen other fine sorts. Honeysuckles—Tartarian, Scarlet Trumpet, Yellow Trumpet, Woodbine, Chinese, Sweet-Scented, &c Bignonia—great flowering, common crimson, &c.

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Hybrid Perpetual Roses—La Reine, Madame Laffay, Baron Prevost, Rivers, and many other brilliant sorts.

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HERBACEOUS PERENNIAL PLANTS—a fine and very select collection, including many of the most splendid Pæonies, as Pottsii, Reevesii, Humei, Whitleii, Fragrans, &c.; Phloxes, including Van Houtii, Picta, Speciosa, Breck's Fleur de Marie, decussata, &c.; Spiræas, comprising lobata, aruncus, japonica, &c.; Iris, many fine sorts; Lythrums, Dictamnus, Delphiniums, Aconites, Baptisias, Campanulas, Funkias, Yuccas, &c. &c.

Catalogues gratis—orders with remittances promptly filled—packing done in the most secure manner for any distance by canal or railway. Oct. 1—1t.

Public Sale of Land,

WILL be sold at auction on Friday, October 15th, a valuable tract of land, containing one thousand acres, lying in the county of Loudon, near Leesburg, Va., and contiguous to the Goose Creek Canal. For further particulars address the subscriber, by letter post-paid, at Richmond, Va. GEORGE L. BRENT.

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THE subscriber has for sale a few pairs of Cochin China, Red, White and Grey Shanghaes, White and Speckled Dorkings, Golden Polands, and small clean Legged Nankin Bantams, any of of the above breeds cooped and delivered in Albany or New-York city free of charge. W. H. SOUTHWICK,

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HORSE POWERS, Threshers, and Separators. The Endless Chain or Railway Powers of our own manufacture, both single and double-geared, for one and two horses, which has never been equalled for lightness in running, strength, durability and economy. They are universally approved wherever they have been tried.

2d. The Bogardus Power, for one to four horses. These are compact and wholly of iron, and adapted to all kinds of work.

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4th. Trimble's Iron-sweep Power, for one to four horses.

VEGETABLE BOILERS, used for cooking food for stock, holding from 15 to 120 gallons.

ROAD SCRAPERS for levelling roads, filling ditches, &c. Price $4.50 to $12.

ROOT PULLERS.—A useful instrument for removing bushes, roots, and small stumps.

BUSH and BRIER HOOKS and Scythes of various patterns.

WATER RAMS of every capacity, and combining the latest improvements.

PUMPS.—Suction and Forcing Pumps of all sizes, with pipe, at lowest manufacturers' prices.

VEGETABLE CUTTERS, cutting sufficiently fine one bushel per minute. Price $10 and $12.

STRAW CUTTERS of 30 different patterns and sizes, at all prices, from $3 to $45; both hand and horse power, for hay, straw, corn, and sugar stalks.

GRAIN MILLS, Steel and Cast-Iron Mills at $6 to $25, and Burr Stone at $50 to $250, for horse or steam power.

CORN AND COB CRUSHERS, of different varieties, efficient and durable both for hand and horse power.

RICE THRESHERS, suitable for large or small Plantations, and adapted to Wheat, Rye, Barley, and Oats.

MEAT CUTTERS—of several sizes—will cut from 50 to 200 lbs. per hour of sausage meat by hand. Cost $5 to $30 each.

SAUSAGE STUFFERS—will do the work of 40 hands, at $4 50 and $5 each.

BRICK MACHINES of the best construction, will make 10,000 to 15,000 bricks per day by hand.

PLOWS, a large assortment suited to every description of work and soil in the Southern, Western, and Northern States.

CHEAP SOUTHERN PLOWS.—Nos. 10¼, 11¼, 12, 14, 15, and every variety, including several new and highly popular kinds, for sale in large quantities.

THRESHERS.—Improved Threshers made upon the best principles, threshing clean with great rapidity.

FAN MILLS for Wheat, Rye, Oats, &c., of the best construction.

RICE FAN MILLS made expressly for the South.

HAY AND COTTON PRESSES.—Bullock's Progressive Power Presses, combining improvements which make them by far the best in use.

CORN SHELLERS of great variety of patterns, to shell either by hand or horse power. Will shell from five to 100 bushels of corn per hour.

WAGONS and CARTS, double or single horse, suitable for the farm, the road, and heavy trucking.

GARDEN and CANAL BARROWS, light made or extra strong, as desired.

MEAT CUTTERS, capable of cutting fine for sausages, and other purposes, 100 lbs. or more per hour.

Our implements occupy three large stores, and we believe they make up the largest and most complete assortment in America. In addition, we have a machine shop employing upwards of one hundred men, where any articles in our line can be made to order.

A. B. ALLEN & CO.,
Oct. 1, 1852—tf. 189 and 191 Water st., New-York.

THE CULTIVATOR

Is published on the first of each month, at Albany, N. Y., by

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THE CULTIVATOR.

TO IMPROVE THE SOIL AND THE MIND.

C F Morton

NEW SERIES. ALBANY, NOVEMBER, 1852. VOL. IX.—NO. 11.

Draining on Heavy and Light Soils.

Two of the best papers which have lately appeared on the subject of draining, are the statements of JOHN JOHNSTON, of Seneca county, and THERON G. YEOMANS, of Wayne county, published in the last volume of the Transactions of the New-York State Agricultural Society, and to both of whom prizes were awarded for their successful experiments. In one case the land was a heavy or clayey, and in the other a light or gravelly loam; the former being distinguished by its adhesiveness when wet, and by its cracking when dry, and the latter by the absence of these properties. Any person who has practiced draining on soils possessing these opposite characters, must have observed the great difference in treatment required in some parts of the operation. On a heavy soil, care is particularly required to facilitate the escape of water from the soil to the drain; on a light one, to prevent the washing of the soil with the water into the channel, and causing its obstruction. After having constructed many drains on a *heavy soil*, by simply filling the lower half with stones, and covering them with straw, and then with earth, without meeting with any subsequent difficulty, we found the same process wholly unadapted to unadhesive soils, not a single season passing without the occurrence of numerous obstructions by the settling and washing of the earth among the stones. To prevent such disasters, we found it needful to cover the upper surface of the stones with very small or flat pieces, and then the whole as closely as possible with slabs from the saw-mill, of white oak, red beech, or some other durable wood, before applying the turf or straw, for the reception of the earth. We observe evidences of a similar difference, in the papers before us. J. Johnston, whose soil is heavy, fills his ditch at intervals with stones, which rise above the surface, wherever it is desirable to admit large quantities of surface water, and through which it passes freely down into the tiles below. On light soils as they usually occur, these structures would be choked in a single season. On the other hand, T. G. Yeomans, who occupies a light soil, found, as others have done, that ordinary stone underdrains were liable to become stopped, both from the washing of the earth, and the digging of rats, mice, and meadow moles; he also found even the horse-shoe tiles objectionable, from their liability to become filled by the washing of the earth beneath them, and *tubular* tiles the only kind that proved to be secure from these accidents.

J. Johnston gives gives some striking examples of the success of his experiments, which has led him to construct at different times, *sixteen miles* of underdrain, or as we have learned since his paper was written, *twenty miles* up to the present time. Six acres, (in a twenty acre field,) so wet as seldom to give a remunerating crop, even of grass, were drained, and the whole field plowed and planted with corn. The drained portion soon showed a marked superiority in the crop, the whole field yielding at the rate of *eighty-three* bushels per acre,–one of the largest crops, if not the most so, ever known in the county. The field attracted much attention, and parties in examination walked easily over the six acres, while all undrained land was muddy. Subsequent crops showed so decidedly the profits of draining on this field, that the whole was subsequently subjected to the operation; and of the very large growth of clover resulting from it, "not one square foot froze out," and good crops of any thing sown or planted, can now be relied on. Another field of partly low land, "saturated with water," was drained, and the first crop in an unfavorable season, was 40 bushels of shelled corn per acre, on land where nothing but coarse grass had grown for twenty years before. A crop of wheat, "a heavier" says he, "I never saw stand up," was reaped from this ground, but it had not been measured when the paper was written. He draws his tile three miles from the factory, and finds underdraining to cost him about 30 cents a rod, and at about two rods distance asunder, $22 to $24 per acre, which is usually repaid in two crops, and in some instances more than repaid by a single crop.*

T. G. Yeomans, who has constructed *nine miles* of tile drain, finds nearly an equal advantage on his light loam, —land generally "thought to be quite dry enough." The large amount of water discharged, in one instance, at the roadside, from his tiles laid in this reputedly dry soil, furnished a practical illustration of the need of draining, to those who observed it, stronger "than all books ever written on the subject, valuable as they may be." On this land the ground becomes dry two or three days after the frost passes out, or after a heavy rain, permitting it to be worked at almost any time—drying uniformly, so that all works alike. A young orchard was nearly destroyed by winter on undrained land; but after draining, the trees were replaced and succeeded perfectly. He brings his tile from Waterloo and Albany. the nearest 30 miles; and finds the drains to cost him, when completed, 40 cents per rod, and at about three rods apart, $25 per acre.

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* A long whipple-tree, permitting a horse to walk on each side of the ditch, enables him to fill it rapidly by plowing in the earth.

We have given but a meagre outline of these valuable papers—those who wish to understand the details of the process, with many other interesting particulars, are referred to the Transactions of the New-York State Agricultural Society for 1851.

Agricultural Fairs.

The importance and usefulness of Agricultural Fairs has not been over rated. They have done more than any other one means to awaken the desire for improvement, to arouse the ambition to excel, and to furnish tangible evidence that superior culture will produce superior products. From small beginnings, these farmers' festivals have extended themselves over a great part of our land, and every year vies with its predecessor in the beauty, excellence, and variety of its exhibitions. This is well; but ambition should not stop here. The farmer, the gardener, the breeder, should carry home with him something more than his diploma and premium. He should acquire, in his experience, the power to carry his improvements to a still higher degree of perfection. The mere repetition of the same scene, under slightly varying circumstances, will soon tire. New elements must mingle in the rivalry of every competition, fresh energy must be brought to every recent discovery and improvement, or we tread in the same beaten circle.

All the experimenting, thus far, on the different modes of culture, on the soils best adapted to certain crops, on the manures most efficacious on different soils, and when applied to differeent crops, has not demonstrated one generally admitted and safe conclusion. Our farmers consent to assemble year after year, bringing with them the same implements, the same stock, the same articles of manufacture, and having received the accustomed premium, they go home well satisfied with their progress.

The failure to derive any lasting good from such exhibitions is directly chargable on the farmers themselves. Careful reports have been made of the proceedings of each Agricultural Society, which are accessible to the mass of farmers, agricultural papers keep their subscribers informed of all the improvements and discoveries in culture, and each farmer must systematize the facts for himself, and draw his own conclusions as to what is adapted to his wants.

There is no such thing as avoiding the labor necessary to arrange the experience of others, so as to appropriate it to individual use. Eminence in farming, as in all other pursuits, must be the result of personal observation and study; and the compilation of facts, however valuable, by an editor, will not make amends for the want of such personal effort as we speak of. Scientific men will do their part faithfully and well—editors will use their best exertions to arouse public interest and properly direct it, but "each man must build over against his own house." The golden age of farming will never come till each agriculturist goes thoughtfully about his own work, investigates and decides for himself his own matters of economy. Universal intelligence is the *sine qua non* of universal success, and when it comes to be considered as important for a farmer to be educated to his profession, in order to live by it, as it is in other callings, then, and not till then, will the progress of Agriculture be certain and constant.

We venture to say that hundreds of farmers take an Agricultural paper, who do not derive from it the slightest advantage, merely because they do not classify and digest what they read. So, many who attend an Agricultural Fair, gratify only their curiosity for sight-seeing—admire, it may be, what is pleasing or novel; but never think that their main business should be to inquire into the means which have been used in the production of premium articles, the manner in which the fine cattle are bred, and the advantage of employing improved implements in their farm labor. Too many look with an envious spirit upon all that is better than their own, deride what is inferior, and go home to plod on. This state of things may be incident to the comparatively recent origin of fairs in many parts of the country; still, we think there is an error here which needs correcting.

We are led to notice another prevalent evil among the agricultural community, and that is a want of organization among farmers for promoting their own interests. They are not recognisable as a class, save at State and County Fairs; they claim no rights, assert no privileges, demand no exemption, but suffer in silence, or spend their strength in fruitless complainings. In other occupations men club together to maintain the position of their craft; they call for the protection of their interests, and they find means to secure their ends. Mechanic's institutes are very common in our large manufacturing towns. Young men are taught by their daily experience and observation, that superior education and industry are necessary to success in their trade, and many a penniless apprentice has risen to eminence by his own exertions, aided by a library, and whatever other means were in his power. On the contrary, the leading question with our farmers too often is, how shall I get independent of my calling? how can I avoid the drudgery and toil of it? and not how shall I improve my farm the most, and make farming the most honorable and delightful of pursuits? We want to see a universal consolidation of the masses for self-improvement, and the rights and well-being of farmers, made foremost in our national councils, as they are the most deeply connected with national prosperity. When the united voice of the farmers of this republic comes up in one cry, they must and will be heard.

When they come to feel the truth of the remark which politicians love to weave into their honied speeches, that the "bone and sinew" of the nation's strength lies in them, then will they not sit in sackcloth and ashes at the gate of legislative assemblies, but go manfully in and take the rights which have been too long entrusted to those who neither sow nor reap, nor gather into barns, but eat the fruits of other's labors. There should be in every town a "Farmer's Club," not consisting merely of a few of the more wealthy, but of the entire body of farmers. This club should own a library of Agriculture, consisting not only of the more popular class of agricultural publications, but also of all the foreign standard works on this subject. In this way a vast amount of instruction and information might be derived, and the expense, when divided among a large number of farmers would not be very considerable. This club should hold frequent meetings, in which discussions on various topics, the communication of individual experience, and the results of private reading, should form the distinctive feature.

The approaching winter season will be a favorable time for the forming of such clubs, and if we mistake not, such organizations will effect, more speedily than any other means, a union of agriculturists and the promotion of their interests.

Sheep and Fleeces.

A correspondent of the *Wool Grower*, (W. D. Dickinson, Victor,) gives it as his opinion that the waste by washing is much greater than people are generally aware of. He sheared a two year Saxon ram without washing, and found after weighing and washing in cold water, that the fleece had lost 52 per cent. When washed with soap the waste was 44 per cent—nearly three-fourths on the whole. The sheep ran in winter in a well littered yard, and in summer in clean pastures.

Another correspondent, (Geo. Campbell, Vt.,) states that the live weight of his French Merino buck "Matchless," is 260 lbs,; his fleece, one year's growth, was 20 lbs. 12 oz., after losing a portion of it on the sea voyage. The present season, with ten months growth, and only ordinary keeping, it was 18¼ lbs. The average weight of 60 ewes of this breed, did not much exceed 100 lbs. The average weight of fleeces was 12½ lbs. "This season the ewes were *thoroughly washed*, and after suckling lambs through the winter, sheared only a fraction short of 6½ lbs."

A Michigan correspondent of the same paper, in showing the difference between good and bad breeds, says, "We once kept a sheep that clipped just *fifteen ounces a year*, never more, and sometimes less,—it was a very hearty feeder. On the contrary, we have taken from five to sixteen pounds of wool from some of our best Merinos, *and have yet to discover that they consume more than the one alluded to.*"

Sewing Machines.

The Scientific American states that since its first notice of the invention of the sewing machine of E. B. Howe, of Cambridge, Mass., that paper has described seven different sewing machines. Among them, is the machine of A. B. Wilson, which he has since brought to great perfection, and has obtained two American patents, and has made arrangements to get it patented in the principal kingdoms of Europe. The Scientific American says, "Wilson's Machine, is, in our opinion, a great triumph of American genius. It is no larger than a neat small work-box, very portable and convenient, and we have seen fine shirt-bosoms and collars stitched by it in a more perfect manner than we have ever seen done by hand work. There are now, we believe, about 500 machines in operation, and orders exceed the supply. * * * The sewing machine is but on the threshold of its career; it is but partially known and applied in this country. Private families know nothing about its use, and shoemakers and saddlers have not yet tasted its benefits. Mr. Wilson informs us that he is about to make one that will sew boots and shoes with a rapidity that will astonish all the sons of St. Crispin." Any invention that shall abridge these tedious labors, will ultimately prove of great benefit to all parties concerned—for whatever lessens the aggregate labor performed by a whole community, soon results in the advantage of every member of that community. One of Wilson's machines will enable a woman to make a fine shirt with all its seams, in one hour.

Can Money be Made by Farming?

Eds. Cultivator—I have been a subscriber to your valuable monthly for two years, and have attentively read all the previous volumes. As my researches have not resulted in the conviction that farming pursuits, however desirable in other respects, are sure to be profitable as a business, I am led to suppose that the difficulty must be either in myself, or a certain unwillingness on the side of editors to promptly give the whole truth. For instance—Why is it so notorious, that men universally pronounce farming occupations to cost more than its results amount to, weighed in the balance of debt and credit? It certainly looks as if there was some ground for such a judgment. Agricultural papers are always putting in the fore ground, the delightful advantages of country life, the pleasures of farming. But where is the working farmer, retired merchant, sea captain, or amateur, who can give us the real truth, covering the results of five or ten years? You will hear a theorist charm his audience with the prettiest systems of rotation imaginable, and the talented chemist crying over the dreadful waste of organic and other manures by large cities; and what does it all amount to? Does he farm it? What responsibility dare he assume, who urges his fellow man to invest his capital in what he dare not himself? The truth is, I am yet to see, in any modern work, an authentic record of any man's farm for a course of years, in this country, stating that it has or has not paid him, a reasonable family expense, and left him square at the end of the year—unless he happens to be one of your *grubbing, anti-book-farming* characters, who do all their *own work, don't educate their children*, and live with scarcely any of the comforts of life—thinking that money is all and all, and nothing else is worth possessing.

Now I want you to frankly tell me, if I can, by a judicious expenditure of capital, with a market not far distant, bring ordinary land to a condition that will enable me to support my family comfortably?

You perceive I propose an earnest investigation, and my reason for it is, fairly to know, from creditable sources, whether I am justified in freely investing money on my 40 acres of land, with any prospect before me that the returns will, after five years, compensate me for the extra outlay.

Once more, is it not true that all farming journals are united in representing that the prejudices against farming among the crowds of young men who throng the marts of commerce, is occasioned by a distaste of labor, or its slow returns, or by reason of caste; and do you not endeavor to convince them that these impressions are wrong? Indeed, do you not often try to convince them that although they will not become rich quite as fast by farming as by successful trade, yet that they are sure of freedom from wasting excitement, and may enjoy what is worth more than large returns accompanied by sleepless nights. This is all very plausible, but the misfortune is, that they don't think as you represent. I can speak for 10,000 young men now in New-York, who are compelled to struggle onward in the almost hopeless race for competence, who would cut loose from such confinement, could they have the evidence before their eyes, that with a small capital, competence is attainable on a well cultivated farm.

I heard it remarked by an intelligent man of Massachusetts, before a county audience, that were all the farmers in the state to sell off their farms, and invest the proceeds in bonds and mortgages, &c., they would be much better off. Now will you be kind enough to inform your many readers the names of ten intelligent farmers in our state, who realize a competence from their respective farms—whose business for a series of years can be pronounced profitable? I fear it cannot be done. I hold it decidedly wrong for a retired merchant to live without occupation, and inasmuch as I have chosen, from a long cherished preference, a country residence, I must cordially acknowledge that I am possessed with the common feeling of my fellow men, and find it hard to swallow a yearly loss, after the pains, labor, and expense of producing crops, and getting for an equivalent the only satisfaction of knowing that I could support my family cheaper in town, and have less trouble.

Don't think me impertinent, or wishing to cast any discredit on you or your compeers of the press, but I am desirous of being encouraged, if in your power consistently so to do, and will persevere if I can see a fair prospect of success in the future. MERCUTIO.

REMARKS—The gist of the above anonymous communication, is comprised in the question, whether the person who wrote it can support his "family comfortably" from 40 acres of land? How does he suppose it possible that such a question can be answered from the data he gives? We know nothing about the land, its capabilities of production, or the value of its produce. We do not even know where it is situated. He tells us there is "a market not far distant," but we have no information as to what market is meant, the prices of agricultural and horticultural articles, or what could be raised from the land to the best advantage. He is just as indefinite in regard to the amount of income he requires from his 40 acres. He wants to support his "family comfortably;" but how do we know what his family is, or what expenditure of money would keep an indefinite number of people in that indefinite state called "comfortable?" Upon the whole, he has given us as a *poser*—we acknowledge the proposition is too hard for us to solve.

As to the general question of the profits of farming, it is easily answered. Take the whole farming interest of the country. Does it lose or gain? Obviously gains. What but agriculture supports four-fifths of our population? In our own state, we have many sections where agriculture constitutes the only resource of the inhabitants. Is our friend so ignorant as to suppose that there has been no increase in wealth in these districts for "a series of years?"

As to the remark charged to "an intelligent man of Massachusetts," that all the farmers in that state would do better to sell out and invest their money in bonds and mortgages, we think there might be some question as to his "intelligence." As to the names of "ten intelligent farmers in our state," who make farming profitable, we do not wish to make an invidious array of names, but if our correspondent will give us his own name and residence, we will send him the names of *one hundred* men who, for "a series of years," have made money by farming, and who will be ready to show the way it was done. In the mean time we would refer our friend to our volume for 1847, pp. 180, 205, 265; for 1848, pp. 169, 192, 297; for 1851, pp. 35, 38, 397. EDS.

Agricultural Resources of the Great West.

THE REARING AND FEEDING OF HORNED CATTLE.—Next to wheat, and corn, the rearing and feeding of neat cattle, on the western prairies, may take rank in point of importance. Some locations are of course much better adapted for stock than others, and the same applies to all branches of agriculture; but the undeveloped agricultural resources are comparatively so boundless throughout the entire states and territories forming the upper Mississippi valley, that a person desirous of engaging extensively in any department of agriculture, will find no difficulty in selecting an appropriate location. To an eastern grazier and feeder, the prairies could not be otherwise than fascinating; and the facilities for the business are such that it may be extended to any given extent, without exhausting the summer range for cattle. The sleek and fat appearance of cattle, that are fed upon the prairies, is good evidence of the fattening properties of the herbage; and where cattle are well wintered they may be fattened fit for market on the natural grasses, without the aid of grain.

The extent of the prairies bordering the large streams can only be estimated by the length of the rivers or streams along which they stretch. A very common size is from ten to fifteen miles in width, and from thirty to fifty miles in length. A long the edge of those prairies, or skirting the timber (the latter being confined entirely to the streams,) the settlements of the country are mainly located, leaving the range for stock in the centre of the prairie, which of course is occupied free, to all who choose to allow their cattle to graze upon them. Tens of thousands of acres of high rolling pastures, are thus allowed to remain in commons, owned principally by eastern capitalists, at points near the main thoroughfares, and even in many cases contiguous to populous towns and cities. These cattle ranges are admirably adapted for the groth of corn, and all the variety of grains, and cultivated grasses; and where necessity requires it, corn and root crops, may be grown at a nominal cost, to be fed upon the ground, to finish the fattening process for market. Prior to the California emigration, stock cattle for feeding could be bought at one half the prices asked in Ohio; but the outfit for the overland route being made almost exclusively along the upper Mississippi and her tributaries, tens of thousands of oxen, steers, and cows, have been bought up at nearly eastern prices, thus changing materially the market value of stock cattle for feeding. The inexhaustible capacity of the country for the business of rearing stock, is such that the supply in future years will keep pace with the demand; and the business of feeding for market may fairly be considered yet in its infancy. The high eulogies that may in fairness be lavished upon the Sciota valley, as a region adapted for the grazier and stall feeder, of neat cattle, may with equal if not greater propriety be given to the entire states and territories forming what may be aptly styled the valley of the upper Mississippi river. If the Sciota country can annually send her tens of thousands of sleek and well proportioned fat bullocks to the New-York markets, Illinois and Iowa may with much less difficulty send their hundreds of thousands to our eastern sea board. The undeveloped resources of these states, to say nothing of Missouri, Minnesota, and Wisconsin, for the fattening of cattle alone, are sufficient to employ an active capital of many millions of dollars, and a well organized force of laborers equal to the entire adult male population of those states. To form some idea of the possibility of exhausting the natural capacity of the country for the cattle business, the extent of the undisposed public domain, and the extreme fertility of the soil are only necessary to be carefully computed; and then to this may be added about an equal amount of unenclosed lands in the hands of speculators.

So soon as the railroads now in course of construction, extending westward from the principal Atlantic cities, shall be completed to the Great Father of waters, which in the course of three or four more years will be consummated at three different points, then the entire order of things will be changed so far as feeding cattle on the prairies for the eastern markets is concerned A new life will be imparted, not only to the business of rearing and feeding cattle, but to all departments of agriculture, so soon as the Atlantic and Mississippi shall be bound together by the iron rail. These roads running, as they will do, in parallel lines across the most fertile portions of the vast fertile planes of the west, at intervals of from fifty to sixty miles, making, as they will do before the lapse of ten years, some six independent and rival roads, will have an almost magical influence in bringing into favorable notice to travellers and others, the unsurpassed undeveloped and neglected resources of the Great West.

The winters, though as severe as in the same latitude on the Atlantic coast, are on the whole much more favorable for wintering stock, owing to the absence of snow during, in many cases, the entire season; but the best winter ranges are found skirting the streams among the sound growth of timber, where the grass continues green later in the season, and makes its appearance earlier in the spring; and the timber forms an excellent protection to stock, from the cold and raking north winds that are so characteristic to the western prairies during winters. Other departments of this subject will, on some future occasion be critically discussed. W. G. Edmundson.
Keokuk, Iowa.

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Drilling Wheat.

Edward Stabler, in his admirable essay on the advantages of drill seeding, states that after examining its results on some 800 or 1,000 acres, besides large experience on his own land, he finds there is not a single instance where it has not proved the most profitable, first, in the saving of seed, and secondly in the increased product of the grain, amounting to from one to six or seven bushels per acre. He thinks five pecks of seed drilled are equal to two bushels sown broadcast. He has known the increase, in one case, by careful comparison of the two modes, to amount to nine bushels per acre in favor of drilling. He relates an interesting incident:—A vender offered a drill for the increase in a crop of fifty acres of wheat—to be determined by sowing a few strips broadcast for comparison. But before harvest the farmer preferred paying the hundred dollars, the price of the drill, with interest. On carefully ascertaining the increase, he found it to be one hundred and fifty-three bushels.

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Agriculture, Unscientific and Scientific.

Eds. Cultivator—From all quarters comes the cry, we want a systematic theory of agriculture. One says my land is becoming poor, how shall I enrich it? Another, my crops are diseased, how shall I prevent it? Another cries, insects devour the fatness of the land, how shall I destroy them? From all our borders comes up the cry, "come over and help us"—voice answers to voice, and hill-side and forest bring back the echoes in the length and breadth of our land.

Aye! aye! sir, shouts some erudite seer, I have a panacea for all your ills. Pay for an analysis of your soil, and follow my directions, and you may supply all the elements of fertility to your impoverished soil. The sample of soil and the ten dollars being received, the answer comes back in a chemical formula, which the farmer must get translated before he understands it, and perhaps get corrected before it is right. So many equivalents of ammonia are to be retained, so much phosphate of lime is to be applied, so much carbonate of potash must be combined, the soil must be yearly analysed to ascertain what constituent is wanting; all this being done, you have the essentials of successful farming. And this we are to understand is *scientific* agriculture.

One complaining of blighted crops is told that he must underdrain his land and use a sub-soil plow, and his land will grow richer day by day, and his grain escape all maladies. Nothing more is necessary to ensure the improvement and fertility of a farm. This too is *scientific* agriculture.

To one who wishes to know how best to preserve manure and how to apply it, the answer is returned that animal and vegetable manure is of little consequence compared with mineral fertilizers—that barn-yard manure is old-fashioned and behind the age—that the bases of all soils are mineral substances, and that as these become exhausted by cropping, the soil grows weak and worthless, and that these mineral components must be restored to bring the land into heart again. This too is *scientific* agriculture.

Others studiously avoid adopting any particular theory and write grandiloquent, non-committal articles on the sublime results which the future of *scientific* agriculture will open up. This high sounding method of enlightening public sentiment has many and zealous supporters. Professors suddenly spring into grey hairs and wisdom, and would-be agricultural literati become as thick as grasshoppers. Agricultural periodicals expound their favorite hobbies to their credulous and admiring subscribers, puff their respective restoratives for exhausted and diseased nature after the fashion of quack medicines, and every now and then publish the astounding results which have attended their labors.

We might make pages of extracts from agricultural publications, to prove all we have said, and much more, but it is not our purpose to find fault with those who choose to pursue a different course from the one we deem best. Still we firmly believe that although much that is said and written in the aforementioned style is true, it is designed to do great mischief and to effect incalculable harm.

Very many necessarily derive their notions of improved farming from such ultra writing, and failing to realise all that is advertised, are out of all conceit of book farming. They condemn the teachings of really scientific men, because empiries or wanton cheats palm off their vagabond theories for reliable truth. Not long since, at an Agricultural Fair, we listened to a tirade of abuse directed against all those who undertake to teach the principles of successful agriculture, without a practical knowledge of the details of farm labor. Farmers were told to rely upon their own observation, to let books and theories alone, and be content to learn wisdom in the way that nature designed every man should—by patient toil. That man had been prejudiced against his own interest by partial, extreme, and false representations, made by these self-constituted apostles of Agricultural Science. Nor is this a solitary instance. There are thousands of farmers who would gladly adopt any means of improvement, were they assured that they would not be victimised by some humbug or other. As a class, farmers pride themselves on their intelligence, and their ability to detect a cheat, and having once been decieved, they resolve never to trust again. For this reason, if for no other, those who undertake to direct public opinion, and advance the cause of agriculture, should weigh well what they publish, and see to it that they do not retard, rather than help on the interests of the agricultural community.

The fault more often lies in ignorance—a wrong use of terms, and a confusion of thought, than in any intention to deceive. It grows out of an ambition to do more than means are provided for doing—to know more than it is possible to know, and to be wiser than the age.

We would not be understood to condemn the utility of calling in chemistry to the aid of Agriculture—to undervalue any improvements of the day, or to censure without reason. Chemistry has already done much for agriculture, and in the hands of chemists may do much more; but that chemistry is the "philosopher's stone" of agricultural progress, we do not believe, or that chemistry and scientific agriculture are synonymous terms. The principles of vegetable growth cannot conflict with the laws of chemistry; for all nature is in perfect harmony with itself. No patent invention can supercede the immutable course of nature, or stimulate our soils to lasting productiveness, any more than the intoxicating cup can make the mind more healthy and vigorous. Seed time and harvest came in their appointed time, before Liebig and Johnston and Norton, brought in their treasures of science to the aid of Agriculture, and now that Mapes has so far outstripped all competitors in the march of *scientific* progress, no great change has come over the spirit of the farmers' dreams. Chemists may amuse themselves with their theories, and shed ink like water in defence of their favorite hypotheses—speculators may concoct splendid projects for the amelioration of labor, and reap golden harvests as the reward of their impudence—but the silent, powerful, undercurrent of agricultural and national prosperity moves in an altogether different channel. Wherever a thoughtful, prudent farmer is earning his bread, wherever a resolute, laborious man is observing the constitution and course of nature, wherever economy and common sense are exercised, there is the work of improvement going on—there is agriculture really becoming *scientific.*

"Science is knowledge reduced to a system," and just so fast and so far as the principles of vegetation, the proper use and application of manures, the laws of farm husbandry and economy, the preparation and treatment of soils to adapt them to particular crops, and in short the whole routine of farm labor becomes systematised and conducted upon rational principles, does the practice of agriculture become a *science.* We protest against the use of the term scientific as applied solely to Agricultural Chemistry. We claim that it has a wider and a more universal meaning, and that farmers are wronged by the exclusive and partial views so often made public on this subject. We hear too much about the laboratory and too little about the farm—too much about analysis and too little about the diligent hand that maketh rich—too much about science and too little about practice—too much about what *may be* and too little about what *is.* If our agricultural papers would give us more facts and less speculation, draw more of their matter from experience and less from imagination, devote their energies more to the universal spread of information, and less to the private interests of particular men, we should have a press on which we could rely, and to which we could turn as the fountain head of streams to water and fertilize our land.

I do not find fault with The Cultivator, as I think it has generally pursued a consistent and intelligent course; but when one reads some articles which are published on agriculture, and that too from those who profess to lead public sentiment, no well wisher to *scientific* agriculture and the improvement of our rural population can hold his peace. Give us stirring articles on subjects of general interest, but let them have common sense for a sub-stratum,—portray in as glowing language as you please the claims of improved culture, but let conclusions be based on principles and facts, and thus will "book farming" and the teachings of agricultural periodicals take strong hold of the minds of farmers, and work out the proper results of really *scientific agriculture.* Cultor.

Good and Bad Farms.—A ten acre field, costing fifty dollars per acre, and ditched, manured and improved, at fifty dollars more, so as to give double crops, is much more valuable and profitable, than twenty acres unimproved, costing the same money.

Agricultural Statistics of the State of New-York.

(Compiled from the United States Census for 1850,*—for the N. Y. Tribune.*

Counties.	Acres of land. Improved.	Acres of land. Unimp'vd.	Value of farms.	Value of farm tools.	Horses.	Asses and Mules	Milch Cows.	Oxen.	Other cattle.	Sheep.	Swine.	Value of live stock.
Albany, ...	228,505	68,877	$11,339,756	$470,878	8,587	4	12,155	2,496	7,723	37,558	25,285	$1,171,553
Allegany,...	191,969	186,320	5,540,150	361,897	7,054	33	14,926	3,099	19,682	103,219	11,453	1,294,858
Broome,....	158,392½	131,070	5,586,307	197,036	4,232	5	12,131	3,772	11,145	30,650	8,393	852,565
Cattaraugus,	206,850	261,859	6,216,993	359,333	7,387	3	19,949	4,843	26,560	71,638	12,585	1,339,081
Cayuga, ...	298,633	99,863	15,086,322	541,770	12,503	9	18,113	3,428	19,905	122,416	28,769	1,861,844
Chautauque,	310,733	281,581	10,836,732	374,653	10,281	2	32,382	6,055	31,083	137,453	17,663	2,114,932
Chemung, ..	124,715½	108,557	6,352,356	251,873	4,865	4	10,016	2,278	7,552	22,597	12,051	780,399
Chenango,..	332,909	169,082	9,555,847	436,606	8,757	4	30,873	5,223	22,002	88,811	16,282	1,831,980
Clinton, ...	133,578	102,504	4,256,119	198,170	5,717	4	5,816	1,475	7,594	31,725	9,179	772,259
Columbia, ..	297,483	62,066	15,684,468	492,516	7,901	10	13,583	3,921	10,336	103,532	38,278	1,507,279
Cortland, ...	165,447	95,312	5,405,517	351,481	5,721	7	20,020	2,610	14,052	38,660	10,211	1,227,235
Delaware, ..	352,941	291,693	8,583,681	439,623	8,231	....	34,493	6,351	22,611	65,196	17,302	1,948,026
Dutchess, ...	378,506	96,620½	25,181,302	758,895	8,861	16	18,023	6,620	18,129	96,330	49,757	2,358,603
Erie, ...	270,874	191,382	12,441,745	515,303	11,916	10	25,172	4,117	17,893	66,318	20,240	1,627,240
Essex,......	166,951	136,610	3,393,385	182,446	4,365	12	6,747	2,085	8,808	50,206	5,796	677,718
Franklin, ..	103,203	64,146	2,298,912	159,578	3,650	4	6,974	1,915	8,876	27,436	5,222	502,589
Fulton, ...	117,413	47,122	3,465,299	199,085	3,717	7	7,416	1,124	5,803	13,484	8,239	596,807
Genesee, ...	203,874	69,708	10,505,382	433,480	9,685	5	8,908	2,157	10,857	116,829	18,710	1,245,431
Greene, ...	207,523	106,895¾	7,943,072	344,550	5,814	6	11,919	2,933	11,026	22,280	16,515	1,000,540
Hamilton, ..	13,845	23,687	220,777	14,614	289	....	780	335	872	1,617	316	58,870
Herkimer, ..	245,648½	94,534	10,494,314	411,570	7,650	....	35,978	1,071	10,982	15,791	15,073	1,387,348
Jefferson, ...	418,510	179,799	13,986,823	679,293	15,406	1	45,186	3,436	29,370	60,330	27,873	2,515,100
Kings,......	17,419	3,443	4,130,700	90,460	3,304	127	2,791	85	627	20	5,336	317,672
Lewis, ...	137,822	95,229	5,289,486	357,455	4,307	2	21,045	2,648	8,615	15,368	9,041	972,928
Livingston, .	229,762	86,938	14,018,338	360,978	9,934	23	9,083	2,526	13,207	146,846	18,825	1,343,792
Madison, ...	363,392	93,203	10,829,523	388,555	9,900	4	22,468	2,841	17,309	95,308	16,527	1,701,463
Monroe, ...	302,102½	84,394	19,617,346	782,833	13,576	1	14,201	3,230	11,938	112,297	31,207	1,845,236
Montgomery	192,260½	46,868	8,680,704	367,092	7,202	4	13,766	1,399	9,303	13,379	13,128	1,074,253
New-York,	2,428	245	4,937,000	39,131	7,773	6	2,288	38	48	11	3,802	808,857
Niagara, ...	178,664	102,128	6,709,836	409,995	9,510	....	9,832	2,713	11,646	59,093	20,504	1,088,304
Oneida,.....	476,669	189,572	15,930,355	527,350	14,683	12	47,959	4,112	24,482	70,341	26,793	2,620,199
Onondaga,..	317,280	113,291	17,055,334	804,010	13,987	....	21,203	3,150	22,008	112,990	31,018	2,086,058
Ontario, ...	274,381½	90,996	15,066,953	566,473	10,313	6	11,253	3,138	13,760	149,554	20,147	1,529,572
Orange, ...	315,795	107,903	17,585,393	451,823	8,262	15	38,938	12,376	13,197	23,562	42,051	1,953,092
Orleans,....	163,823	53,631	8,916,810	338,405	7,530	....	7,026	2,055	7,717	58,791	11,135	925,324
Oswego, ...	193,220½	170,060	8,037,526	423,515	8,750	10	21,112	3,512	16,368	35,370	16,621	1,196,493
Otsego,.....	376,868	171,204	12,560,142	597,863	12,210	....	29,958	3,431	21,959	108,244	26,184	2,148,130
Putnam,....	85,501	35,344	4,820,700	141,774	1,598	3	6,990	1,920	4,131	4,503	10,304	536,623
Queens, ...	123,360	46,286	12,373,722	424,541	5,846	97	7,789	1,708	4,255	12,474	18,160	851,576
Rensselaer,.	274,543½	75,203	13,566,420	539,570	8,504	....	16,174	3,265	9,944	85,578	27,739	1,524,503
Richmond,..	10,311	4,863½	1,620,360	46,480	439	13	747	371	682	71	1,327	81,215
Rockland, ..	43,080	34,323	3,269,780	67,952	1,516	139	2,938	495	1,132	999	3,010	239,309
St. Lawre'ce	377,086	262,627	9,212,518	657,505	13,811	....	33,365	6,555	31,441	89,910	18,423	2,141,176
Saratoga,...	281,427	131,562	13,200,759	517,323	9,624	18	15,456	3,040	15,128	56,769	28,198	1,429,972
Schenectady	76,939	28,892	3,820,430	193,943	3,225	2	5,348	801	3,859	12,295	5,560	470,110
Schoharie,..	205,745	105,444	7,317,157	337,615	6,995	....	16,055	2,284	11,548	31,340	17,820	1,212,071
Seneca, ...	127,937	39,541	8,563,490	254,265	5,754	....	5,993	983	6,711	34,599	11,201	737,558
Steuben, ..	336,981	338,415	13,581,268	676,792	12,744	4	21,584	6,744	27,162	156,776	23,939	2,155,090
Suffolk, ...	143,612	210,292	7,195,800	211,147	5,675	214	9,292	1,770	9,994	31,449	14,545	894,957
Sullivan, ...	94,425	141,830	3,513,001	167,109	2,631	45	7,626	3,408	6,711	10,829	6,455	656,948
Tioga, ...	118,240	103,111	4,852,976	173,896	3,863	....	8,893	2,373	9,209	26,895	8,111	644,357
Tompkins,..	223,213½	104,284	10,382,945	403,319	8,923	7	14,993	2,739	15,569	89,631	14,535	1,409,914
Ulster, ...	233,059	207,938	12,438,204	492,107	8,551	36	18,673	4,877	10,389	25,387	36,292	1,188,947
Warren,....	95,480	126,359	1,965,312	105,282	2,721	....	5,202	1,682	6,554	18,403	5,264	418,557
Washington,	299,802	102,242	11,958,955	513,796	9,394	....	16,652	2,217	18,388	152,337	28,375	1,673,515
Wayne, ...	233,603	97,857	11,837,903	572,695	12,127	7	11,037	2,432	16,309	81,279	20,702	1,536,390
Westchester	196,701	55,228	19,522,743	416,047	5,189	8	17,572	5,349	5,674	11,001	23,355	1,326,969
Wyoming,..	223,533½	126,747	8,071,848	394,610	8,725	4	15,022	3,850	18,211	133,116	15,634	1,357,322
Yates,......	133,971	52,529	7,578,553	196,180	5,506	10	6,482	1,258	7,370	62,297	11,762	796,790
Total, ...	12,408,968	6.710.120	$551,546.642	$22.081.926	447,014	963	931,324	178,909	767,406	3,453,241	1,018,252	$73,570,499

Red-legged Locust.

Insects which have been familiar to our senses since the days of our childhood, and which invariably present themselves to our sight, as the season of summer advances into that of autumn, are generally looked upon with almost perfect indifference, in consequence of this very familiarity; few individuals, reflecting for a single moment on the purposes of their existence, or are induced to bestow a solitary thought upon the benefits, or injuries they may be capable of producing in the comforts or luxuries, appertaining to our household economy. This seems to be peculiarly the case with the species, whose depredations are here to be noticed, merely on account of its proving to be one of our social little grasshoppers, insects which are at all times to be met with in our customary walks through the field, and gardens attached to our dwellings. The species alluded to, is the *Acridium femur-rubrum*, the red legged grasshoper, or more properly, locust. In the present season, in some of the northern counties of our state, and likewise in the states adjoining, this insect has been uncommonly numerous, most generally along the borders of our lakes and the shores of the various streams that ramify in every direction through the country. They have appeared in such multitudes, that the light of the sun could but at intervals be seen, from such positions on the earth over which they pursued their flight, and when they descended upon a field, left scarcely a green thing visible. The entire surface of the land, in such districts, over which they passed, appeared as bare and desolate, as if occasioned by the withering influence of the flames. In some instances, we were informed that after destroying all the verdure, they unhesitatingly lit upon the backs of the sheep in the pastures, and commenced devouring the wool with as much apparent relish as if it had been, what we should have supposed, their more natural food. On many occasions, we witnessed them basking in the sunshine, on the denuded surfaces of the rocks, to such a degree as fairly to obscure them from the eye; and many of the larger streams have for some considerable distances been entirely covered by their floating carcasses, tainting the atmosphere with the odors arising from their decomposition, they having been drowned in endeavoring to cross from shore to shore.

We could not learn that the season had been unusually free from moisture, and where we travelled, experienced almost daily rains, but the crops of grass were exceedingly light, and of such a nature, as to be almost rejected by horses and cattle, the cause of which, being attributed most generally to the putrescence of these insects. For a more full and circumstantial history of these ravagers, we introduce the following extract from the travels of President Dwight, as quoted by Harris:

> "Bennington (Vt.) and its neighborhood, have for some time past been infested by grasshoppers (locusts) of a kind, with which I had been before wholly unacquainted. At least, their history, as given by respectable persons, is in a great measure novel. They appear at different periods, in different years; but the time of their continuance seems to be the same. This year (1798), they came four weeks earlier than in 1797, and disappeared four weeks sooner. As I had no opportunity of examining them, I cannot describe their form or their size. Their favorite food is clover and maize. Of the latter they devour the part which is called the silk; the immediate means of fecundating the ear; and thus prevent the kernel from coming to perfection. But their voracity extends to almost every vegetable; even to the tobacco plant and the burdock. Nor are they confined to vegetables alone. The garments of laborers, hung up in the field while they are at work, these insects destroy in a few hours; and with the same voracity they devour the loose particles which the saw leaves upon the surface of pine boards, and which, when separated, are termed saw-dust. The appearance of a board fence, from which the particles had been eaten in this manner, and which I saw, was novel and singular; and seemed the result, not of the operations of the plane, but of attrition. At times, particularly a little before their disappearance, they collect in clouds, rise high in the atmosphere, and take extensive flights, of which neither the cause nor the direction has hitherto been discovered. I was authentically informed that some persons, employed in raising the steeple of the church in Williamstown, were, while standing near the vane, covered by them, and saw, at the same time, vast swarms of them flying far above their heads. It is to be observed, however, that they customarily return, and perish on the very grounds which they have ravaged."

These insects need no description, being easily recognised by their prodigious number.

The remedies recommended for the destruction of these depredators are, to mow the grass early so as to secure a crop before much injury has been sustained; the insects being then unable to migrate, in consequence of the imperfection of their wings, perish on the spot. The fields under these circumstances, will suffer much less during the ensuing season, and should this process be universally adopted, the number of insects in a short time will greatly decrease. Another method is, for four persons to draw a stout piece of cloth over the ground, one being attached to each corner, the two in advance holding their edge near the surface of the ground, and the others more elevated. In this manner great numbers may easily be taken, these are to be thrown into boiling water, and fed either to the poultry or given to the pigs. By turning young turkeys into the fields, great numbers of them will be destroyed, they being exceedingly fond of the food, and the condition of the birds in a short time will be greatly improved. JAS. EIGHTS. *Albany, Oct. 12.*

Manufacture of Manure.

We copy the following statements from the Annual Report of the Hampshire (Mass.) Ag. Society for 1851, and commend them to the attention of all who desire to increase the amount of their manure:

Samuel Powers' Statement.—I have, during the last four years, been in the habit of using compost manure to a considerable extent, and from the experience that I have had in its application, and the results that have attended its use, I now think it far cheaper, and equally as durable for a fertilizer, as the best animal manure. In 1847, I took from my peat swamp, the soil of which is composed of vegetable matter, that has been accumulating there for many years, about one hundred and twenty-five cart loads of this peat, and mixed with it ashes, saltpetre, and plaster, in parts equal to one hundred bushels ashes, one hundred pounds of saltpetre, and five hundred pounds of plaster, for the whole lot. In the spring of 1848, I carted this mixture upon a field adjoining, the soil of which is a fine deep loam, capable of being enriched to any extent, and spread upon two acres; fifty large loads of compost, harrowed it in and planted it with corn. Upon two acres adjoining, of precisely the same quality, forty loads of good yard manure were applied. The result was, the corn on both pieces was good, yet that on which the compost was used was more luxuriant from beginning to end, and produced some seventy-five bushels per acre. After harvesting the corn, one acre of the land composted was sown to wheat, and the other to rye; both crops were good, the part sown to rye producing about twenty-five bushels, and the wheat twenty bushels. And had not the frost killed it out, it would probably have yielded thirty bushels. The rye sown on the two acres manured, produced twenty bushels per acre.

In 1850, I planted the same four acres again, adding ten loads of compost, making sixty loads for the two acres, and putting the same quantity of manure upon the other; it produced a very heavy crop of corn. After harvesting it I sowed it again with wheat and rye, and produced as good a crop as before.

In the spring of 1851. I sowed grass seed and harrowed it in among the growing crop, and it now presents a very promising appearance. My object in experimenting upon these two pieces of land, has been to test the qualities of compost, and its utility in preserving the qualities of the soil, which has been done to my entire satisfaction, both parcels being raised from a low to a high state of cultivation, and can, I think, be mowed for several years to come, with good success.

My anticipations have been more than realised, both in regard to the productiveness of the land, and future prospects of the crops, which are all in favor of composting, one important consideration of which is its cheapness, the cost not exceeding thirty-three cents per load, on the lot, or about one-third the expense of animal manure. My practice is to mix the compost one year, and use it the next. I have also applied it on several other parcels of land, with equal results. In 1849, I put fifteen loads of compost on one-half an acre of land, beside the same quantity of land on which was spread at the rate of twenty-nine large cart loads of manure to the acre. The corn grown from the compost was the best, and produced forty bushels. I also spread twenty loads on grass, as a top dressing, and experienced the same results. In 1851, I applied to one acre about 40 loads of compost, with nothing but plaster, to as good purpose as heretofore, for the growing of corn. Also 30 loads to another acre of corn, and procured about the same as when twenty loads of manure were used, side by side. In all cases where this compost has been used, not only has it produced good crops, but it has much improved the land, so that it is now in a good state of cultivation. *Hadley, Oct.* 20, 1851.

David Rice's Statement.—I present the following statement in regard to a compost manure that I have used and tested for several years. It recommends itself by several considerations. I state in the outset, that the two great objects to be looked after in making manures, are *cheapness* and *strength*. A strong fertilizing manure that *costs but little*, is what farmers most desire. The experiments that I have made, have not been on a large scale, but large enough for the deduction of facts, which I wish to state to the committee.

Immediately after planting in the spring, and after I have used what manure I want, I commence my compost heap for the next season. Into a convenient place, which with me is a hollow in the angle of a bank wall, on the south end of my buildings, I deposit first a load of horse manure. Over this I usually spread the scrapings of my wood yard and cellar, especially in May, and all other refuse substances that will make manure, that I find about my buildings, such as the rakings of the yard, and old leaves, &c., making in all another small load. Over this I add a load of loam, then over the whole I spread about a bushel of ashes. For the next three or four weeks this heap receives from the washroom, all the soap suds and washing water, and from the house all the useless slops and washings of the kitchen, sweepings, &c., being kept continually moist. In about four weeks after the first deposit, I add another load of horse manure, more loam and sand from the washings of road drains spread over the horse manure, and over all, a layer of wood ashes, occasionally adding more during the next four weeks. This heap for the succeeding four weeks, receives as before, all the fertilizing substances that accumulate in the wash-room and kitchen. This process is continued during the summer and fall until snow covers the ground, and then I call my heap finished, only as it continues to receive during the winter, washings, slops, &c.

This manure I have usually applied to corn land, but never expecting to make any written statement as to its fertilizing qualities, I have not tested it as methodically as I otherwise should have done. I have tried it by the side of good barn manure, and by the side of good hog yard manure, and it produces a heavier growth of corn than either. I noticed, particularly this season, that where I manured corn in the hill with my compost and hog-yard manures, a load of each being deposited side by side, on equally good land, that corn grown over the compost manure was the most vigorous, darker colored, and produced quite as large a crop in harvest time, as that grown over the hog yard manure.

I have tried it also in the hill for potatoes, and find it fully equal to the best hog-yard manure. I claim for this manure the following advantages:

First it is *cheap*. Horse manure *alone* is a miserable fertilizer, and this, excepting the wood ashes, is the only substance of any value, that enters into the composition. Combined in the way stated, it helps to form a valuable manure. Loam and washings from the road side, cost nothing but the labor of getting them. All the refuse substances around the house, cellar and yard, are got rid of as nuisances, and converted to a valuable purpose. The wood ashes lose nothing of their value combined in this way, but rather are rendered more useful by imparting their virtues to other substances, making a compost more fertilizing than ashes could be alone.

Again, as a matter of cleanness and convenience, this compost heap is of great advantage. How often do we see around farm houses and farm yards, accumulations of substances rendering the premises filthy and unsightly. The compost heap receives all these otherwise useless accumulations, and greedily drinks in all the slops and washings that otherwise would be forming dirty and offensive drains about the premises; but in this way, they are fitly and economically disposed of. *Leverett, Oct.*, 1851.

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Never run in debt unless you see a way to get out.

Improvement of our Common Sheep.

In the improvement of sheep, as well as of all other animals, the *male* is considered of more importance than the female, and more care is therefore necessary in selecting one; yet, for the production of perfect animals, it is absolutely essential that both male and female be well bred; and if not individually perfect in every point, the conformation of the *two* should be such as when combined would form a perfect creature. So that, in endeavoring to improve our common flocks of sheep, we should not only get good, first rate bucks, but should select out from the flock the ewes of the best age and make, to put with him; and in choosing them, should have an eye to those particular points we wish to have well developed in the lambs. In this way much may be done to improve our ordinary breeds of sheep, without much outlay in purchasing improved stock. A knowledge of the principles of breeding, and care in the selection and management of the ewes from which we intend to breed, and the choice of a buck adapted to counteract any deficiencies in the ewes, will, if judiciously persevered in for a few years, greatly improve any flock of sheep.

Farmers often procure a buck which, however useful he might be for other flocks, is altogether unsuitable for the flock he is intended to serve. Again, in a large flock of ordinary sheep, there are often two or more kinds of ewes, with characteristics entirely different from each other; hence a buck that might be first rate for the one, and calculated to improve the breed, would be altogether ill adapted for the other, and would propagate imperfections rather than neutralize them; yet how common is it to let the whole flock run together, and have the indiscriminate use of the same bucks. Instead of this careless, heedless, and profitless way of breeding, the flock should at this time be judiciously assorted into lots of forty or fifty, having a buck with each lot possessing strongly the particular points in which the ewes are somewhat deficient, and in accordance with the object for which the lambs are raised. Where a small flock is kept, and only one buck is needed, a farmer can often select out some ewes of a particular conformation, that would be better served by a neighbor's buck than his own. The neighbor, too, may be in the same circumstances; and thus a change of ewes to be served by each other's buck, would be mutually advantageous to the owners, and beneficial to the flock.

The best time at which to place the bucks with the flock, depends a great deal on the breed of sheep, and the object of the breeder. If his flock is rather coarse wooled, and he wishes early lambs for the butcher, the middle of September is perhaps not too soon. This, as ewes go twenty-two to twenty-three weeks, would bring the lambs about the first of March, which, in the vicinity of large cities, where early lamb commands a good price, is the best time—yielding most profit although a little extra care and feed are necessary. The buck, in this case, should be a Leicester or South Down, as their cross with common sheep gives her a larger lamb, with increased tendency to fatten, and early maturity. Such a cross with our common half-blood Merino flocks, produces good mutton sheep, and it is often profitable to adopt it for that purpose; but it would be folly to attempt to *breed* from such a mongrel race. If the object of the flock-master be merely the production of wool of fine quality, he should procure Spanish or French Merino bucks, selecting from his flock the best ewes of from three to eight years old, to place with them. It is not desirable to have the lambs come till there is a prospect of grass for the mother; so the bucks should be kept from the flock till the latter part of October. And as grass is often scarce and innutritious then, it will be advisable to give a little clover hay, or perhaps oats or peas, to stimulate the ewes at that time. The buck, too, should be grained or have a little oilcake at night, separately from the ewes. Nothing pays better than careful attention to the flock during winter; and towards spring the quality of their food should be increased, and a few ruta baga or mangel wurzel may be given with advantage. Especially are they beneficial when the ewes are heavy in lamb, or after lambing, if grass is not ready. It is not, however, desirable to have the breeding ewes too fat; but we are sorry to say this is a caution too little needed—more flocks being injured by scant and non-nutritious food, than by over feeding. —*Gen. Farmer.*

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Worcester Agricultural Society.

A large pamphlet of 78 pages, embracing the Transactions of the Worcester (Mass.) Agricultural Society, for 1851, exhibits the energy and enterprize of this local body, which contrasts strongly with the condition of some other county societies, whose whole annual proceedings consist of two and a half columns in the village newspaper, one week after the fair.

The following interesting facts, drawn from the pages before us, cannot fail to be acceptable to our readers:

Among the *animals* exhibited, was the bull Sampson, only 19½ months old, but possessing the remarkable weight of 1,400 lbs. It was raised at North Providence, R. I., and is owned by H. B. Lyman—"perfectly symmetrical in shape, and seems to possess, in a rare degree, the qualities of a good breeder." We are not informed of his breed.

A cow belonging to Joseph A. Reed, five years old, one half native, one-fourth Ayrshire, and one-fourth Holderness, yielded in nine days, early in summer, 15 lbs. 15 oz. of butter; and during 9 days early in autumn, 10 lbs. 14 oz. of butter. Another cow, of native breed, yielded during the same periods, 12 lbs. 15 oz. and 11 lbs. 4 oz. respectively. W. S. Lincoln exhibited two cows, mostly native, which yielded as follows:—

1st cow (¼ Ayrshire) yielded in 9 days in June, 266 lbs. milk, yielding 12 lbs. 9 oz. butter.

2d cow yielded in 9 days in June, 299 lbs. milk, yielding 13 lbs. 14 oz. butter.

1st cow yielded in 9 days in September, 233 lbs. milk, yielding 11 lbs. butter.

2d cow yielded in 9 days in September, 236 lbs. milk, yielding 9 lbs. 15 oz. butter.

They had no feed but pasture, with cornstalks added in autumn. The preceding year, the first cow gave more than 6 lbs. of butter during the same periods over the present year. How much better would a herd of such animals as these be on a farm, taking their manure as well as milk into consideration, than entire dependence on grain crops. Experiments like these, accurately recorded after weighing or measuring, would soon give any farmer a great deal of valuable information.

On the subject of *plows*, we have the following reminiscence from the report of Levi Lincoln, chairman of the committee, who, after speaking of the high improvements made by Ruggles & Co., and others, remarks: "Within the period of the present generation, John Wesson, of Grafton Gore, had a reputation little less marked, within the limited extent of his capacity to supply, than is now enjoyed, far more deservedly and widely indeed, by our own Ruggles & Mason, yet how immeasurably different in power and completeness the implements of their respective production! Wesson's plow was of *wood*, with an iron coulter and share only. The mould-board, if secured at all from accident and sudden force, or rapid destruction by wear, was left to be protected, in the judgment or convenience of the purchaser, by a plating of rusty iron hoops, or worn and inverted horse-shoes, or such like appliances, quite as effectual in their use, to the resistance of the power of draft, as to the endurance of the instrument."

The committee on *poultry* furnish the following items of statistics:—The amount of sales of poultry at the Quincy Hall Market, Boston, in the year 1848, was $674,423. The amount of sales for the whole city of Boston, the same year, was not less than one million dollars. The amount of eggs sold during the same year at Quincy Hall Market, was 1,129,735 dozen. During the same year, the whole value of eggs, consumed and exported in France, is estimated at 57 millions dollars; the amount invested in poultry in the United States, $12,176,170; in Great Britain, $50,000,000.

An estimate is presented, showing the relative cost and value of *oats* and *carrots*, which makes the cost of one acre of carrots of 500 bushels at $25 more than for an acre of oats of 40 bushels. Calling the oats worth 35 cents per bushel, and the carrots half that or 17½ cents, we have $68 worth of carrots per acre against $14 worth of oats. Every seedsman, we would suggest, should get the substance of this statement which we have here given, printed in *large letters* on his boxes of carrot seeds, that "he may run who reads"—that is, run his carrot-drill in putting in extensive crops.

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On the Rearing of Mules for Market.

It is not probably generally known, that the rearing of mules is one of the most profitable occupations, engaged in by American farmers; and that the supply does not keep pace with the demand. The principal markets are those of the cotton and sugar growing states; and for the California and Oregon emigrants, who take the overland route. At the present time a three year old mule, standing thirteen hands high, and of good action, will readily bring $100, and those standing fourteen hands high, and well broken to harness, and possessing good points, command from $120 to $130 each. The great endurance of the mule; their adaptedness for hot climates; the great age to which they attain; the ease and cheapness with which they are raised, and their hardy constitution, together with the high price obtained for them, and the increasing demand, all tend to make it a business worthy the attention of those engaged in pastoral life. But very little science appears to be employed in the propagation of this species of animal hybrid; and the best course to effect a change, would be for agricultural societies to award liberal premiums for the best formed, and largest, and most active specimens; and to encourage the importation of the largest sized and best made jacks from the south of Europe. To secure large and well made mules, the first consideration is to obtain the services of a large, active, and neatly made jack; and the next point of importance is to select the largest and most sprightly mares, and the progeny from such a description of stock would afford a race of mules that would command the highest prices, and for all kinds of labor in a hot dry climate, would be incomparably superior to horses for all kinds of severe drudgery, and especially for farm labor and roadsters. By careful crossings of this kind a popularity would thus be imparted to the mulish family, that in no other way can be obtained, and there is no good reason why mules averaging sixteen hands high, embodying a beautiful combination of the points of both races of animals, cannot be raised with as much certainty and success as attend the efforts put forth to improve the race of horses, or any of the domesticated animals. Good mares for the purpose are abundant in Pennsylvania, in parts of Tennessee, and in most of the northern states; and the Spanish Jack should be imported and made to take the place of the stunted and inferior race that are generally found in this country. This may at first sight appear a small matter, but the demand has become so urgent and universal for mules, throughout a very large portion of the Union, that to our minds, agricultural societies might with great advantage to the interests of agriculture, hold out liberal encouragement for the improvement of this description of stock. The Board of Agriculture for the State of Ohio, have at both the annual State Fairs, awarded very liberal premiums to the owners of the best specimens of Jacks and mules; and in the rearing of this stock, that state is now taking a very prominent stand, as well as in most other departments of agriculture.

The President of the Board of Agriculture, Michael L. Sullivant, Esq., who is the proprietor of a farm of some nine thousand acres of beautiful land, lying contiguous to the state capital, and along side of the national road, some seven miles in length, is the owner of several Jacks, and his annual sales of mules range from three to four hundred, mostly three and four year olds. Many of his mules are broken to the plow and wagon, and the strongest and finest teams that are brought into the Columbus market, are those of Mr. Sullivant's, consisting of four well trained mules to each wagon.

The business of trading in mules is becoming a great favorite with many farmers in Ohio and Kentucky, and the day is not distant when this department of stock rearing will be very extensively and profitably conducted throughout all the north-western states. The Upper Mississippi Valley, including the states of Illinois, Indiana, Wisconsin, Missouri and Iowa, hold out greater inducements for the propagation of mules, than any other portion of the Union. The boundless and inexhaustible character of the pasturage of this interesting region; and having a direct water communication through the unrivalled Mississippi, to the southern states, where the future demand will largely exist; together with the new and increasing demand that has been imparted by the tens of thousands of California and Oregon emigration, that annually pass along the over-land route, mostly making their outfits in those states, all tend to make that the most desirable location that could be selected for prosecuting extensively the business of propagating and rearing large and handsome mules.

The entire cost of rearing a three-year-old mule in Illinois or Iowa, need not exceed thirty dollars, and the price obtained ranges from sixty to one hundred dollars, according to quality. No other stock are reared with so little expense and risk, and none affords so large a profit, with the prospect of a continued steady demand. To make the business as profitable to the farmers as it is susceptible, more pains are required on the part of those who undertake to select the Jacks, and instead of employing small and badly shaped mares, the largest and finest should be selected for this purpose. Then, instead of allowing the young mules to become stunted the first winter, by a short allowance of provender, and even that of an inferior quality, as much pains should be taken in providing them with wholesome food, as is given to the rearing of colts or calves. The young mule is very hardy, yet to secure a full and early developement, he requires artificial food in winter and spring, as well as any of the young of the other descriptions of domesticated stock. W. G. Edmundson.

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Prolific White Clover.

I had been in search of wild plants on the 6th of July, 1851, and happened to find a root of white clover of the same kind as the red. I planted one of the stems in my garden, and it grew well, producing three blossoms before fall. I covered it in the winter with dry stalks. On the first of May, 1852, I removed the covering and buried it in one inch of earth. In eight days the clover made its appearance. Twelve stems branched in every direction, and on the 1st July twelve blossoms appeared, each double, like the red clover. Stem after stem grew from each of the twelve, and blossom after blossom, till on the 10th there were 84 blossoms, on the 20th, 345—on the 30th, 690—each of the blossoms having from 84 to 130 petals.

I think it will continue to blossom during the month of August. It covers a plot of ground as large as a carriage wheel, with an average length of stem of 2 feet 3 inches. Can any of the farmers in the states produce such a plant in one year and twenty-five days? Several of our farmers and gardeners confess never to have seen its like before. I think I shall have thirteen roots from it this fall, beside the seed. The text book on the Agriculture of New-York, for 1848, says, " Only two kinds of clover are cultivated to any considerable extent in this country, the common red clover, and the cow-grass, or short clover;" besides these there is the white clover, found in pasture lands.

One of the numbers of the Cultivator speaks of the White Dutch clover. I have never seen it, and would like to know to what class it belongs. I have several varieties of clover in my garden, but one is missing. It belongs to the white kind, and runs on the surface of the ground, like the strawberry.

There are various species of plants yet undescribed. Francis McKay. *Richmont, Halifax, N. S.*

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Saltpetre for Seed Corn.—The Germantown Telegraph gives the statement of Tracey E. Waller, who soaked his seed corn in a solution of saltpetre and hickory ashes, made of 2 lbs. of the former and one pint of the latter in a gallon of warm water, the seed soaking 3 or 4 hours. The soil was not very good but the corn was luxuriant. This experiment is easily repeated—but it may with great propriety be asked, what influence can this soaking have on the corn plants after the first few days of their existence, when the roots have run off far beyond its possible influence?

Horticultural Department.

House Plants in Winter.

"What is the reason that my plants do not grow so well as Mrs. Jone's? I am sure I take a great deal more pains with them, and water, and nurse, and air them, but all will not do; they are weak, slender, sickly, and some of my best plants have died—while Mrs. Jones seems to take very little care of her's, and yet they grow and bloom beautifully!"

This appeal to us for aid and advice, which has just been made, is not the first complaint of this kind of ill success. The truth is, some plants are actually nursed to death. Care and attention bestowed on plants, *which they do not need*, are worse than no care at all. It is knowing *just what to do*, and doing that, and no more, that gives some persons their success. Or, as a late writer remarked, there are two great points to be attended to, 1. Not to *let* your plants suffer by neglect; and 2, not to *make* them suffer by interference. We would class the requisites for good treatment, as follows:—

1. Plenty of light.
2. A due supply of water.
3. Proper temperature.

Fresh air, cleanliness, and good soil, are obviously of importance, but are less likely to be neglected than the three first named wants, and we shall therefore add a few additional remarks under these heads.

1. *Light.*—Plants cannot by any possibility have too much of this. The stand should therefore face the window, and be placed as near to it as practicable; and the window should be broad, as little obstructed in its light by outside trees as the nature of the case will admit. But rapidly growing plants require most light; hence such should be placed more directly in front of the window.

2. *Water.*—This must be given according to circumstances. A plant in nearly a dormant state, needs very little—those in a rapidly growing condition require considerable. Too much water will make the latter grow slender, but they will bear a greater supply if in a strong light. It must be remembered as a standing rule, that dormant plants may remain comparatively in the dark, and with little water; and growing ones should have a good supply of water and a full supply of light. But it must not be forgotten that green-house plants generally are nearly dormant during winter, and the soil must therefore be kept but moderately moist, as the plants in this condition do not pump any moisture from the soil, and little escapes directly by evaporation. Drainage, by filling one-fifth of each pot with charcoal, is of importance.

Temperature.—Many house plants are destroyed by too much heat, which increases the dryness, and both these causes together are more than they can endure. A cool room, never as low as freezing, is best. From 50 to 55 degrees is much better than 65 or 70, the ordinary temperature of living rooms.

Syringing the foliage with tepid water, to wash off whatever dust accumulates, is of use; and the admission of fresh air, when there is no danger of chilling or freezing the foliage, should not be neglected.

Market Pears.

In planting 500 trees for standards to constitute a market orchard, would you plant mostly Virgaliens, as some of my neighbors have done, or a proportion of other sorts, and what should these be? M. W. *Western New-York.*

The Virgalieu (or White Doyenne) as grown in western New-York, as well as in some other portions of the country, is a fruit of transcendent merit, not only for its fine quality, but for its great and early productiveness, and for the hardiness of the tree. But the scab and cracking, which renders it "an outcast, intolerable even to sight," as Kenrick designates it, in some parts of the eastern states, has of late years appeared to some extent, both in western New-York and Ohio; and it may therefore be somewhat hazardous to plant it exclusively. We think under these circumstances, it would be best to make a selection of five or six of the best varieties, foremost of which, and in the largest quantity, we would place the Flemish Beauty, a free growing sort on pear stocks, and bearing fine crops of large, handsome, and excellent pears, ripening about the same time as the Virgalieu. The Onondaga, though not so good, is a large, handsome and productive variety, and would undoubtedly sell well. The Louise Bonne of Jersey which grows so well on quince, produces so abundantly, that it should form a large proportion of a market orchard. The Bartlett, for an early autumn sort, will not of course be forgotten; and the Vicar of Winkfield for a late market pear is deservedly popular for its enormous crops. When the keeping and ripening of winter pears shall be better understood, it is not improbable that they may form a most important class for profitable cultivation, and among which the Easter Beurre for long keeping, will certainly be one of the best, the planter not forgetting that it must have a rich, warm, and highly cultivated soil.

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Sweet Bough—Color of Apples.

"Does the Sweet Bough ever have a faint blush? Some specimens exhibited at our State Fair called the Bough, had a blush, but I can find no descriptions that mention it." J. A. D. The Sweet Bough, in common with nearly all green or yellow apples, has a faint blush when grown fully exposed to the sun—and this is so common or almost universal with apples of this class, that pomologists have regarded it as hardly necessary to mention as a distinctive point.

Different seasons, soils, and stocks, produce various results in coloring apples. We have known the Rhode Island Greening, in some years, to be a full deep green, on every part of the tree; and in other years, to have very generally a deep reddish brown cheek. The Porter is usually remarkably free from a brown tinge; yet during the growth of the fruit towards the close of summer, it has been seen to have conspicuous stripes of red in the sun, but which entirely disappeared when fully matured. A long warm season does not always produce the highest color—it was observed a few years since at one of the Ohio fruit conventions, that the specimens from the warm region of Cincinnati were not nearly so much reddened as those from the cooler shores of Lake

Erie at Cleveland. An interesting incident under this head once occurred in the case of the first specimens of *Jewet's Red* which we fruited—they maintained so green an appearance until nearly grown, that we were led to doubt their genuineness; but being blown off by wind, they were carried into a room, where in a fortnight, a profusion of red stripes gradually covered the whole surface.

Westfield Seeknofurther.

"In your description of the *Westfield Seeknofurther*, you state that the leaves are 'sharply serrate.' We have an apple called the Seeknofurther which answers your description in every respect but the leaves, which are *crenated*." J. A. DONALDSON. *Ravenna, O.*

The leaves of the Westfield Seeknofurther are perhaps more variable than any other variety. When the trees are vigorous and the leaves large, they are frequently sharply serrate; but we think it would be generally more accurate to say *serrate* simply. Small leaves, or those on crowded trees, become *serrate-crenate* and often strictly crenate.

Plums at the South.

Wm. N. White, of Athens, Georgia, gives in a late number of the Horticulturist, the results of his own and other's experiments in plum raising in that state. The Imperial Gage proves the best—next Elfrey and Prince's Yellow Gage. The Columbian succeeds very finely. The Jefferson, very large, and the handsomest of all, has in Georgia, as well as elsewhere, disappointed expectations as to its quality, lacking juciness and flavor. Among other sorts found to be valuable, are Chickasaw, Italian Damask, Duane's Purple, Bingham, Bleeker's Gage, and for cooking, German Prune, Horse Plum, and Red Magnum Bonum. The following have proved worthless, viz: Washington, Diamond, Gen. Hand, Semiana.

The Green Gage, Lawrence Favorite, Coe's Golden Drop, and Huling, have not been tried.

Profitable Pear Trees.

Wm. S. Lapham, of Macedon, N. Y., has a pear tree of the Virgalieu or White Doyenne pear, standing in a corner of his house yard, which is probably over 25 years old, and which yielded the present year *fifteen bushels* of fine smooth pears, which sold on the ground at two and a quarter dollars per bushel, or about thirty-four dollars for the crop. One hundred and sixty such trees on an acre,—which of the size of this would not be crowded—would at the same rate yield the handsome sum of *five thousand dottars*. If half this were the yearly interest, (and crops nearly as large as this are often obtained,) what would be the value of the principal, that is, of one acre of such trees.

Since writing the above, we have been informed of a still larger crop. Israel Delano, of the same neighborhood, gathered from two trees of the Virgalieu, forty-two bushels of pears, all of which were sold at two and a quarter dollars per bushel, or 94 dollars for the two.

The productiveness of this variety is very great, and in Western New-York it succeeds admirably. Of late years, however, there have been occasional indications of the scab and cracking, which have rendered this pear worthless in some of the eastern portions of the Union, and which, as we observe by Dr. Warder's Review, is beginning to appear in Ohio. Hence the prudent planter will not set out this variety exclusively, but will mix in a good proportion of those equally productive sorts, the Flemish Beauty, Louise Bonne of Jersey, Vicar of Winkfield, &c.

Shade Trees.

The subject of shade trees for the road side, and the improvement of the appearance of farm houses and buildings, is of late years exciting more attention among farmers. Yet the desire for the decoration of their homes is nothing like as general as it should be. Farmers, as a class, are apt to fall into dull, monotonous, plodding life. Like other men, they want variety in their business, which would have a tendency to make life pleasant, and home happy. One of the best antidotes to the cares and trials of life, is to turn the mind to home and rural embellishments.

One of the first steps in improvement is the planting of shade and fruit trees by the road side, and around our houses. If every farmer and landholder could be induced to plant trees along the borders of their land, the entire highway would soon become a delightful avenue. How grateful would this be to the traveller—what an addition to his comfort!

The trees might be set at such distance apart, as not to interfere with or injure the growing crops, and the fallen leaves which should be gathered in autumn, for manure, would more than pay for all trouble. The great difficulty is, that not one farmer in ninety-nine feels interest enough to set out trees about his own house, to say nothing of the road side. Still, if one or two men of the right stamp could be found in every town, we think the object might be attained by forming town societies, by which funds could be raised for this purpose.

As to the kind of trees to be planted, more has been said than is necessary, considering that so few have been planted at all. Twenty-five or thirty years ago, the Lombardy Poplars were set out almost exclusively. They grew up quick and straight, making at the best a very stiff appearance; but at the present time few of these trees are left in the country. The two best trees for shade are the Sugar Maple and the Elm,—both very fine and ornamental. Especially for yards we prefer the maple, as it makes a thick clean shade, and seems to impart a coolness to the atmosphere in hot weather. For shading a street elms are preferable, as they spread their branches wider than the maple.

Along the road-side we would set out promiscuously, elms, maples, oaks, beeches, chetnuts, hickories, ashes, birches, and all indigenous trees that grow well. In this way plenty of shade trees can be procured, which is not the case when one variety is used exclusively.

The trees should be well taken up, so that as many of the small roots as possible, be retained, and then carefully set out. If cattle are allowed to run in the streets, they must be protected from this great nuisance. If any trees should fail to live after the spring planting, they can be easily replaced in the fall. When these trees have begun to thrive, what town would grudge the money laid out in such improvement. How much more satisfaction can be derived in thus simply adorning our homes, than where the whole population seem to follow the motto—"Every man for himself, and the d——l for us all."

On most of our farms there is more or less waste land which is not capable of cultivation, such as steep hill sides and rocky soils. If these spots could be covered with forest trees, in a few years a pleasant appearance would be given to these barren places. Many of these bare places, if protected for a time, will spring up spontaneously with trees, and where this is not the case they may be planted at a small expense. But many farmers instead of planting trees on such spots, cut off the growing wood and beat down every rising sprout. We know a farmer, who cut down a handsome grove of chestnut timber, near the roadside, and instead of allowing the sprouts to cover the ground, beat them down till they were killed. His excuse was that he wanted the land for an orchard, but it proved so rough and stony that he could not cultivate it for this purpose, and ever since the ground has laid a barren, rough, unsightly ledge. So much for that peice of mismanagement. L. Durand.
Derby, Ct., Sept. 15, 1852.

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Pears on Quince.

During the New-York State Agricultural Fair at Utica, evening meetings were held by the principal pomologists in attendance, and a great deal of interesting and valuable information was brought out during the discussions. Among other things, a list of those varieties of the pear was made out, which have been found by experience to succeed well on the quince, and to continue to bear for many successive years, without exhaustion or decline, according to the experience of those present. This list, which was intended to contain valuable sorts only, (and which might have been considerably augmented by poor varieties,) was composed of the following:

Louise Bonne of Jersey,
Duchess Angouleme,
Beurre Diel,
White and Gray Doyenne,
Long Green of Autumn,
Doyenne Boussock,
Henry IV,
Summer Frankreal,
Madeleine,
Stevens' Genesee,
Vicar of Winkfield.
Glout Morceau,
Capiaumont,
Napoleon,
Beurre d'Amalis.
Easter Beurre,
Soldat Laboreur,
Uvedale's St. Germain,
Bergamotte Cadette,
Beurre d'Anjou,
Doyenne d'Hiver Nouveau,
Urbaniste,
Beurre Gris d'Hiver No'vu,
Catillac.

It should be observed that these are such as generally or uniformly succeed on the quince under good care and cultivation. There are other pears which nearly always fail on quince stocks, and which are never thus propagated by prudent nurserymen for sale, among which most conspicuous is the Beurre Bosc. The Marie Louise and Dix are of the same class; yet we have seen a tree of the Marie Louise on quince, seven feet high, which had borne good crops for several seasons; and J. C. Holmes informs us in the Michigan Farmer, that a Dix on quince, in a rich *clay soil*, has continued to grow well for some years. Neither of these were double worked.

We cite these instances to show that single experiments are insufficient to determine the fitness of any variety for this mode of propagation, and we have fully ascertained that some sorts succeed only on particular soils, and fail on others. Hence a list for general propagation should be made up from the experience of all parts of the country, and it is this which renders the above list one of particular value.

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The Rostiezer Pear.

We have fruited this variety for many years, and have always esteemed it as nearly or quite unequalled in quality, among summer pears, standing quite as high among these, as the Seckel does among autumn varieties. We are therefore gratified to find in the last number of Hovey's Magazine, the following remarks by the editor, who, as is well known, has a very extensive knowledge of fruits.

"The Rostiezer is certainly one of the finest of our summer pears; hitherto we have thought it too small to give it a high rank, notwithstanding its delicious, spicy, Seckel-like flavor; *but its smallness has been the fault of cultivators;* this year it comes up to the full size of a medium pear, being here as large as the St. Ghislain, and we have seen specimens even much larger from other places. It is an enormous bearer, and hangs, as the usual phrase is, "like strings of onions," from the tree; we counted no less than nine handsome pears from one cluster of blossoms."

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Preserving Fruit in a Fresh State.

Wm. R. and Eliza Smith, of Macedon, N. Y., have devoted nearly their whole time during the fruit season the present and past year, in perfecting their process for preserving soft and perishable fruits in glass jars, in a frest state, like that when first taken from the tree. Their mode consists substantially in expelling the air from the jars by heat, and then hermetically sealing them; but there are so many minute particulars to be attended to, that one who should remain a whole day in their laboratory, and closely observe every part of the process, would not probably succeed as they do, after a month's trial. In truth, one might as well think to draw a fine picture, without experience, by watching for a few hours the brush of an eminent artist. They preserve strawberries, cherries, raspberries, peaches, plums, pears, tomatoes, &c.; and so different are the details of the process for each of these, that the necessary requirements for one sort, would, if applied to others, entirely spoil them. Of their fruits prepared last year, when they had had much less experience, some proved imperfect by losing a part of the peculiar fresh flavor of newly plucked fruit, while other specimens which we examined, and more especially the *clingstone peaches*, could hardly be distinguished from those of yesterday's ripening. They are particularly successful with tomatoes, the flavor of which, after months of keeping, we much prefer to that of the specimens which are usually brought early in summer from the Island of Bermuda. They have now on hand a large collection of jars or bottles for distribution, and we hope they may reap some reward for the extraordinary labor, skill, and ingenuity which they have bestowed in perfecting their process.

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When you retire to bed, think over what you have been doing during the day.

The English Crab, and the Apple.

Prof. Mapes objects to the position taken by the Maine Farmer, that the English Crab is a distinct species from the common apple, and that the latter did not spring from the former as some have supposed, and as Downing and others maintained. Scientific authority and facts appear fully to establish the entire distinctness of the two. The celebrated English botanist, Ray, regarded them as distinct, and later authorities have given the following specific characters, which show them to be more unlike than many others universally admitted as distinct.

English Crab.—Leaves ovate, *acute, villous* underneath; styles *bald;* fruit acerb, astringent, austere.

Apple Tree.—Leaves ovate-oblong, *acuminate, glabrous;* styles *villous;* fruit more or less sweet.

In accordance with these marked distinctions, is the experience of centuries; for the English crab has been propagated from seed from time immemorial, without changing its character, or presenting any resemblance to the fine varieties of the common apple. It may be observed that the American crab apple, is totally distinct from both.

Wintering Strawberry Beds—Raising Seedlings.

At a meeting of the Cincinnati Horticultural Society, (and we know that they of Cincinnati are not insignificant on this subject) Nicholas Longworth recommended straw or cut straw, or dead leaves, applied in the fall, as the best thing to do for them. Dr. Mosher used chaff, and found it well adapted to apply to the beds after dressing them in spring. Tan-bark was objected to on account of the dirt after rains.

Raising Seedlings.—Longworth would impregnate a large and good pistillate, with the best hermaphrodite, (or *perfect* flowered) and plant the seeds as soon as ripe in good soil in open ground. From 200 seedlings, he would expect 95 staminates, 95 pistillates, and 10 hermaphrodites. They should be planted separate, and the runners cleared till the sorts were proved. Graham advised planting in pots, and driving them ahead with bottom heat—his plants proved mostly staminate. McAvoy would plant in open ground—but select the best plants and force them. He had one bear a year from planting.

Gradual and Successful Progress in Planting.

One of the most interesting fragments of individual history we have lately seen, especially as connected with horticultural pursuits, is contained in the following extract, which we make from the "Notes on Gardens and Nurseries," in the last number of Hovey's Magazine:

"*Residence of Jos. Stickney, Esq., Watertown*—Strange, indeed, is it, to see how slight a circumstance may change and mould a taste for objects previously of no interest whatever. Some years ago, when the taste for the culture of that gorgeous flower, the Dahlia, was carried to a greater extent than now, a gentleman whose time was almost incessantly occupied in commercial matters, and who possessed only a few square feet of garden, in the rear of his dwelling, in the city, was struck with the splendor of one of the exhibitions of this flower, at the rooms of the Massachusetts Horticultural Society, and at once made up his mind to buy a few plants. Spring came, and they were set out;—they flourished,—grew,—and all the autumn repaid the careful attention of a zealous amateur, by a brilliant display of flowers. This was grand success for a beginner. Another year came round, and the dozen sorts were augmented to fifty, and still the same success. Delighted to find himself so well repaid, (unaware it was entirely owing to that love which spared no pains for the welfare of the plants.) the newest and finest sorts were procured, and another season he not only became a competitor for the prizes, but actually carried some of them off!

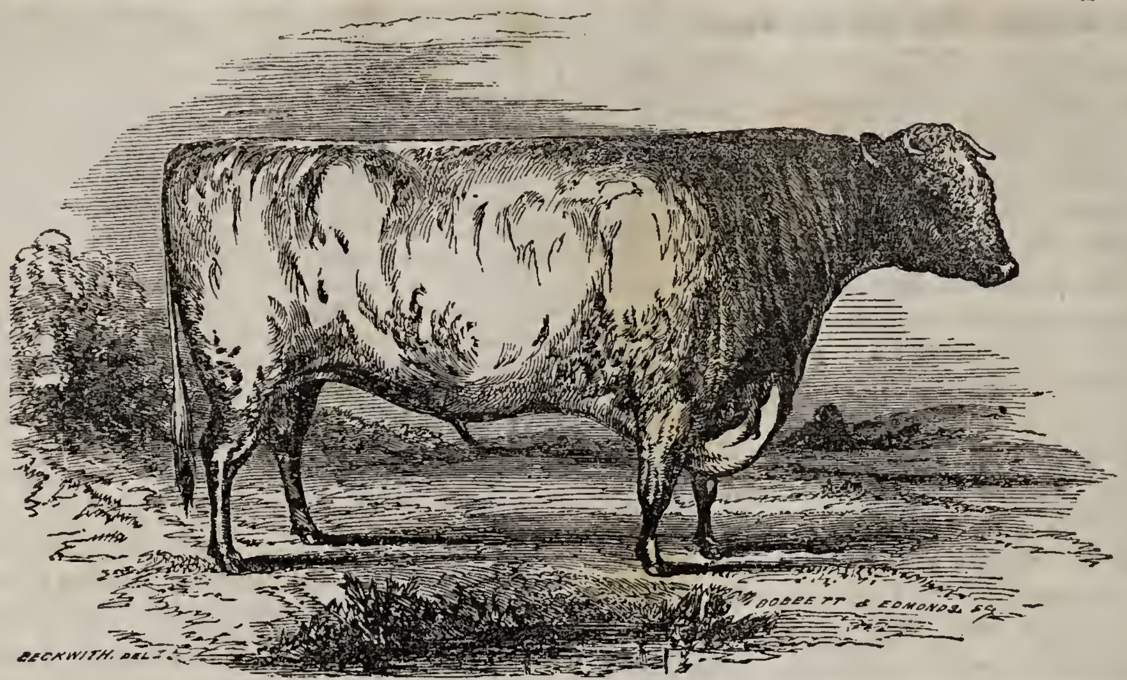
But with a few feet of land, already over-filled, there was no room for further additions to his stock, and he must add more or grow a less number of plants; the latter could not be done, and another hundred feet of ground, worth almost as many acres a few miles from the city, was added. But now other objects divided his attention. The grand displays of fruit were so rich and inviting that to be a mere admirer would not do: why should not success attend the growth of fruit, as well as dahlias; there could be no doubt of it. His resolve was made, and the corners were filled with young pear trees. On they went, growing, thriving, pushing up their vigorous shoots, and spreading out their leafy branches, making sad inroads upon the territory of the Mexicans, and in fact, showing a disposition to dispute all the ground they had heretofore occupied. Time rolled on, golden fruit hung from their heavily laden boughs, and a rich harvest crowned the efforts of the cultivator of the city garden.

And now accompanying him further, we find ourselves on a beautiful spot, on the banks of the river Charles, in the pretty village of Watertown, overlooking its flowing waters on one side, and the thickly settled plain on the other. Terraces, of immense size, covered with trees in full bearing, all the work of half a dozen years, rise one above another, and skirt the river bank. Ascending by several flights of steps, we reach a broad plateau, on which stands the mansion, in the olden style, large, capacious, without ornament, but with that essential of the country house, comfort. It is reached from the front by an avenue from the Milldam road, and is screened in that direction by a grove of gigantic pines, oaks and hickories.

Such is the residence of Mr. Stickney, who was fortunate in purchasing, eight years ago, the estate of Madame Hunt, containing about thirty-five acres, accessible in 20 minutes by the Watertown Branch Railroad, the station being within five minutes' walk. Few places more capable of being made a perfect villa residence, are to be found in the vicinity; and the possession of all this, now under a high state of culture, and affording so much enjoyment to its owner, has been the result of his admiration of a beautiful flower."

The Baldwin Apple in the North.—The Granite Farmer furnishes the information that in Hanover, N. H., the young Balwin apple trees suffer severely by winter-killing, and that it is found the cultivation of this fruit will have to be given up, in that region. It appears to succeed best when grafted into full grown trees. Perhaps the mode adopted by the most skillful nurserymen in cold-wintered Wisconsin would be best—that is, to *bud* the trees instead of grafting them, at three or four feet above the ground. This answers well there.

Apple Trees killed by Potash.—Medicines in excess become poisons. The New England Farmer mentions the case of an orchard of one hundred and six thrifty Baldwins, that were washed with a solution of a pound of potash in a gallon of water. The owner found in two days that he had killed the whole of his beautiful and valuable trees. Soap suds or ashes in water, are strong enough. Guano is an excellent thing for trees, and salt is sometimes good, but it is one of the easiest things in the world to kill trees with them in excess.


BECKWITH. DEL.
DOBBETT & EDMONDS. SC.

"Lord Eryholme," the property of L. G. **Morris**, Fordham, Westchester county, N. Y., received the first premium in the class of two-year-old Short-horn bulls at the show of the New-York State Ag. Society, 1851. He was bred in England, by A. L. **Maynard**, Esq., who, as well as his father, has long had a high reputation as a breeder of Short-horns. The animal in question was "out of condition" at the time the portrait was taken, which gives an idea of gauntness that is not natural. He is a good handler, is straight in the back, good in the crops, and moderately fine in the bone.

Sheep Smearing.

It does not appear to be well understood among the farmers in this country, that the shepherds in Spain and other parts of Europe, have for centuries been in the practice of coating the backs of their sheep with a salve, which is prepared by different flock-masters in different manners.

It would appear that some kind of coating with oil or grease, is considered necessary, and quite indispensable and useful, to promote the health of the sheep, and the growth of the wool.

England alone, paid America in 1851, $24,000 for poor butter to smear the backs of their sheep. It is supposed English farmers pretty well understand the advantages derived by every expenditure upon the farm.

I am in receipt of a "Price Current of American produce," from John Athy & Co., of Glasgow, Scotland, dated 17th July, 1852, which says, "original grease butter is worth 45 shillings for sheep smearing."

The Highland and Agricultural Society's Transactions for 1844, recommend the use of tallow and train oil, in equal parts, as a salve for sheep.

Another writer in the Transactions says, that after considerable persuasion he got one of his tenants to use tallow and train oil, instead of tar and butter, upon thirty of his flock, and that they are in better condition than any of the others.

The common practice and application in England, is to mix a small portion of tar with the butter. But in Vermont we apply what is called the

Cornwall Finish—To 4 measures of burnt umber, take 1 measure of lamp black, one-fourth measure of snuff—mix with linseed oil to the consistency of paint, and put on with the hand after shearing.

This effectually prevents the scalding of the back—drives off the ticks—is a preventive for the scab—sheds the rain and water from the back—promotes the growth of the wool, and the general health of the sheep.

It is reported that the Cornwall Boys charge for this receipt ten dollars, which it is annually worth to any person who keeps 100 sheep—but here you have it gratis. S. W. **Jewett**. *Middlebury, Vt.*

Chapped Teats in Cows.

We have had some experience with this difficulty, and never found anything better as a preventive and cure, than washing thoroughly before milking with clean cold water. If the weather is very raw, a thin coat of pure lard applied after milking, is useful in addition to the washing. Soft butter is said to be excellent for this purpose. In corroboration of the value of this treatment, we quote the following from a communication in the Prairie Farmer:—"I have used various liniments, and many kinds of ointments, but none in my experience comes up to the mark like *clean, cold* water. My practice is to take water to my cattle yard, as much as my milking pail. Every teat, and the lower part of the bag, whether sore or sound, is washed clean. The teats are then soft, the cow stands quietly. and no dirt falls into your pail."

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Corn in Califoynia—A Sacramento correspondent of the Prairie Farmer says, that although vegetables, grain, &c, generally yield enormous crops, that Indian corn does not succeed well from the soil causing too great a growth—that he has seen it 23 feet high, with but little grain. This appears to be a different result from that usually produced in the eastern states, where corn will bear more manure than most sorts of grain.

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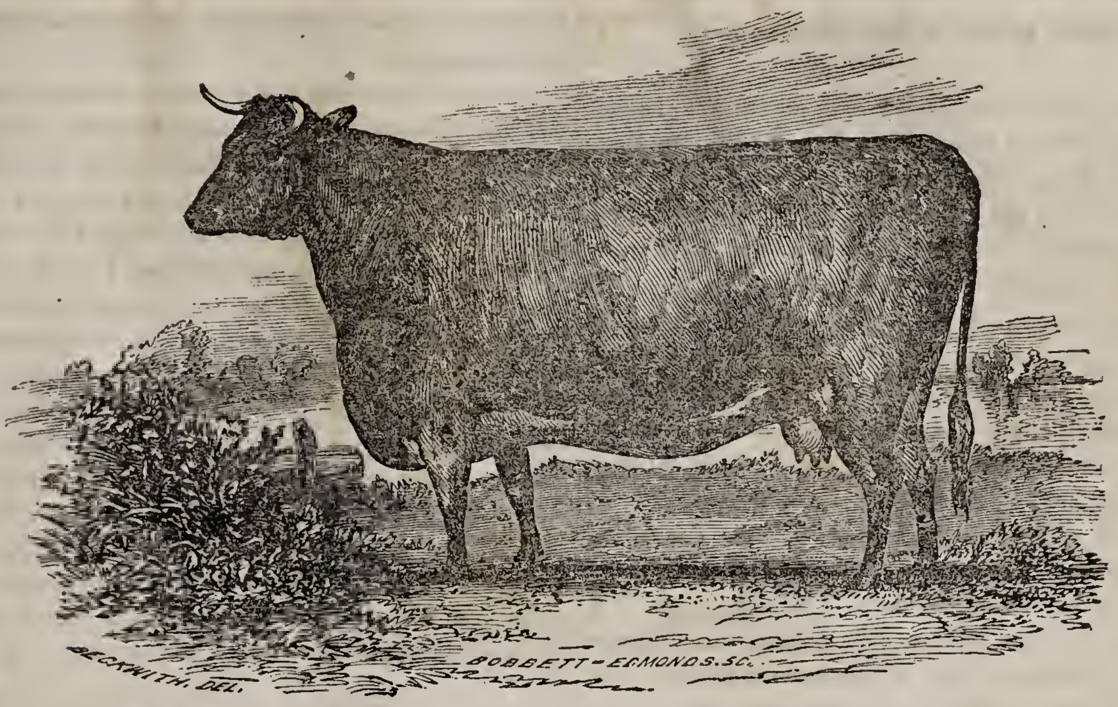
Make no haste to be rich, if you would prosper.


BECKWITH, DEL.
BOBBETT–EDMONDS. SC.

"Azalia," the property of L. G. **Morris**, Fordham, Westchester county, N. Y.,—received the first premium for Short-horn cows over three years old, at the show of the New-York State, Agricultural Society, 1851. She is a cow of good substance, with a well-developed tendency to fatten.

The Lobos Islands and Guano.

These islands, claimed by the government of Peru, and which have, till within a few years, been considered of no value, have become a bone of contention. Barren and uninhabitable as they are, they are the depositories of a wealth, which is destined to fertilize the over-taxed fields of distant countries—that it will ever come into general use, we very much question, but as a special fertiliser for certain crops, and in certain localities, it is valuable. Large quantities are being imported by English speculators, and the attention of the British Parliament is being called to the expediency of seccuring the article on more favorable terms, or of sending ships for the purpose of discovering more islands, upon which similar deposits have been made. A dispute is pending between our own government and that of Peru, with regard to the title of these islands.

The following description of the islands, and the situation of the guano, we cut from "Dickens' Household Words," and will interest our readers:

"The three islands lie nearly due north and south; the breadth of the passage between them being about a mile in one instance, and two miles in the other. The south island is as yet untouched, and from a visit I paid it, I should suppose it to contain more guano than is found in either of the others. The middle island, at which we traded, has been moderately worked, but the greatest quantity of guano is taken from the north island. In their general formation the islands are alike. They all rise, on the side next the main land, in a perpendicular wall of rock; from the edge of the precipice, the guano then slopes upwards to the centre of each island, where a pinnacle of rock rises above the surface; from this point it descends to the sea by a gentle declivity, the guano continuing to within a few feet of the water. Each island has, at a distance the appearance of a flattened cone, but they have all been originally broken into rocky hills and valleys. The deposits of guano having gradually filled up the valleys, and risen above the rocks, the cuttings of the guano diggers vary from a depth of eighty or a hundred feet, to merely a few inches.

"The guano is regularly stratified; the lower strata are solidified by the weight of the upper, and have acquired a dark red color, which becomes gradually lighter towards the surface. On the surface it has a whitey-brown light crust, very well baked by the sun; it is a crust containing eggs. being completely honeycombed by the birds, which scratch deep, oblique holes in it to serve as nests, wherein eggs. seldom more than two to each nest, are deposited. These holes often running into each other, form long galleries with several entrances, and this mining system is so elaborately carried out, that you can scarcely put a foot on any part of the islands without sinking to the knee.

"Though the islands are not large—their average circumference being about two miles— the accumulation of guano is almost incredible. Calculations as to the probable quantity must, on account of the varying depth of the deposits, be very uncertain. I remember making an average of the depth, and deducing therefrom a rough estimate that the three small islands alone contain upwards of two hundred and fifty millions of tons of pure guano, which, at the rate of supply which has been going on during the last five or six year, would require about one hundred and eighty years for removal, and at its English value—which, after deducting freight, is about £5 per ton—would be worth twelve hundred and fifty millions sterling. This is exclusive of vast quantities which have been used by the Peruvians themselves."

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Sheep Husbandry.

We observe in a late paper an account of the extensive sheep husbandry of the brothers Rose, near Penn-Yan, N. Y. On 1,500 acres of land, stocked with over 3,000 sheep, their rotation is three years clover, summer fallow, wheat, and clover (with plaster) for three years again. Such clover, and such wheat—are of course to be expected from this enriching treatment. Their barns are about 30 by 40 feet, and are filled with hay through three successive tier of doors, one above the other,—the hay being put in through the lower first, when they are closed, the next above used. Sheds stand on each side of the barns, made of boarded poles, and with board roofs, open in front, where they are 4 feet high and 5½ feet high at the back. A rack runs the whole length. These barns are conveniently distributed over the farm. They never keep over 100 grown sheep in a flock

Cattle Show at Northampton.

Eds. Cultivator—Agreeably to your request, I have the pleasure to inform you that the Fair of the Hampden, Franklin and Hampshire Agricultural Society, was held at Northampton on the 5th and 6th of this month, and proved an occasion of unusual interest to the large number of farmers assembled on the occasion.

The show of cattle took place on Tuesday morning, but owing to the protracted drouth, which dried up the pasture and caused the sale of the fattest and finest animals to the butcher, there were but few animals on the ground; it was thought there were four times as many the preceding year. The exhibition of articles of domestic industry at the Town Hall was very fine, and was thought to exceed any former exhibition. The display of fruit was large and of the finest qualities, embracing apples, pears, peaches, grapes, figs, prunes, &c. There were many excellent varieties of potatoes exhibited; one of them, the Lathrop Red, is a new variety which bids fair to be of great value, being nearly as prolific as the Rohan, and very superior to it for the table. The results of an experiment with pear trees were shown, which seems of some importance, and ought to be tried more extensively. Two trees were growing near each other, but both produced very poor fruit; it was small and covered with black knots. Some rusty iron was deposited around the roots of the one, the other being left untouched. The fruit from the tree treated with iron rust, was nearly double the size of the other, free from black knots, and very superior in flavor, while the other tree produced a small inferior fruit, covered with black knots, and not worth picking from the tree.

A great number of fine loaves of bread were exhibited in competition for the premium, by the ladies of these counties, with a receipt for making pinned to each loaf. These, with the exquisite golden butter and rich cheeses in large numbers, formed a very attractive portion of the show. There were a very large number of fowls exhibited, embracing all the varieties; among these I noticed some magnificent specimens of the Chittagongs, and Golden Pheasants. The prevailing opinion of the farmers seemed to be, that these large varieties did not pay as well as some of the smaller kinds. The Creoles or Bolton Greys seemed to unite the greatest number of suffrages in their favor.

On Thursday morning there was a show of horses from half past 8 till half past 10 o'clock, A.M. Some of them were very superior; those of the Morgan breed appeared to be most esteemed in that region.

After the exhibition of horses was concluded, the society marched in procession to the Edwards church, which was filled to overflowing by the farmers. An anthem was sung by the choir; prayer was then offered by Professor Fowler, of Amhert College; after which an address was delivered by John Stanton Gould, of Hudson, on the culture of Indian corn, in which he attempted to trace the chemical and physiological history of the plant from the deposition of the grain in the earth to the ripened ear—availing himself largely of Mr. Salisbury's valuable prize essay, and endeavoring to render that great repository of facts available for the purposes of the practical farmer.

After the exercises at the church were concluded, the the society marched in procession to the Agricultural Hall, where plates were laid for over 400 persons; these were all occupied, and the galleries running round on three sides of the room, were also crowded with spectators. A blessing was asked by Rev. Prof. Fowler, after which the company proceeded to discuss a most capital dinner. Speeches were made by W. O. Gorham, Esq., Secretary of the Society, Gov. Boutwell, Edward Everett, Lieut. Gov. Cushman, Rev. F. Huntington, of Boston, and J. S. Gould of Hudson. The speech of Mr. Everett was, like all his speeches, a perfect gem; it not only sustained, but enhanced his reputation. The whole affair was exceedingly well managed, and reflects great credit on the officers of the society, and I believe every one who was present, formed a secret resolution to be again at the fair of the ensuing year. N. N. D.

Construction of Dairies.

It is stated that some of the best dairies in Holstein are constructed and kept as follows, not so much on the grounds of elegance or taste, as of simple *profit*:—They are half under ground, are dry and not damp—always kept at 60°—the floor made of hard brick, cemented,—and supplied with little channels of water—free from the very semblance of dirt—walls smooth, whitewashed, and no dust allowed to adhere to them—air circulating freely,—the vapor from the milk passing off unobstructedly—the pans placed low down on the floor, and never on shelves—and no bad odor of the slightest nature allowed.

Sale of Devon Cattle.

Luther Tucker, Esq.—I send you a statement of my sales of Devon cattle, at auction, on Wednesday, 25th August last. There were 30 animals offered at auction, of which 29 were sold, at fair prices, taking into consideration the short crop of hay in this vicinity.

Gen. Cadwallader of Philadelphia, purchased 17 head—Col. Watts, of South Carolina, four head, and the Messrs. Jones, of Atlanta, Geo., five head. They were the principal purchasers.

Full blood cows sold for $75 to $100—one and two year old heifers, $75 to $125—calves from $35 to $65.

I have now remaining, about 25 head of thorough-bred animals, principally cows to calve the coming spring, and young bulls. One of my cows, Ruby, for which I was awarded the first premium at the Hartford County Show this month, and the first premium at New-Haven County Show, last fall, made in the month of April last, having dropped her calf in February, one pound 13 ounces of butter per day, equal to nearly 12¾ pounds per week. Some of my stock was descended from the bull Champion, awarded the first premium at Utica last month, and now owned by Mr. Colby, of Scipio, whose portrait may be seen in the October number of the Cultivator—he was bred by Mr. Allen, of Black Rock, and sold by him, when a calf with the cow Venus, to R. S. Colt, Esq., of New-Jersey, of whom I purchased when three years old—and used him two years in my herd.

I have kept and bred the different breeds of cattle upon my farm, and am better pleased with the Devons and their grades, than any stock I have ever kept, and think them the most profitable for the New-England farmers. Wm. L. Cowles. *Farmington, Ct., Oct.* 8, 1852.

State and County Fairs.

There are on our table, a large number of reports and lists of premiums awarded at State and County Fairs, which we have not room to publish, or even notice separately. They all agree, however, in placing the exhibitions of the present year in higher rank than those of any previous one. They have been participated in by a larger number of farmers, and with increased spirit and success. Farmers begin to feel that unless they belong to an agricultural society, and raise something suitable for exhibition at its show, they are something less than farmers. It is not so much the worth of the premium offered that induces effort, as the emulation to excel. There is a satisfaction, an honest farmers' pride, in having produced a superior crop, raised a fine animal, or invented a labor saving implement. We look forward with hope, yes confidence, to the time when every farmers' household shall be an agricultural society, forming a tributary to the Town Society, (which we have recommended in another column,) and which, in its turn shall be an auxiliary to the County Societies. These too, come into competition in the Show of the State Society, and thus all work together for the mutual good and a common aim.

Potato Blight.

Eds. Cultivator—On a small patch of ground, [two acres,] I this summer planted the potato, here known as the White Mercer. The sets were put in in rows, and planted about the middle of May. The soil—gravelly clay—had been limed in the fall at the rate of 100 bushels to the acre. When the vines were well up, about the middle of June, I sprinkled plaster and guano along the rows, mixed in due proportions, avoiding to touch the vines with it, and then plowed up to the rows, and finished with the cultivator. The vines grew luxuriantly until the middle of July, when, all at once, they began to wither, and by the middle of August there was scarcely a green vine. I should mention, that in this locality during summer, we suffer much from dry weather. To obviate the effect of this, about first of August I sowed buckwheat broadcast between the rows, to keep in the moisture, and as it were, mulch the tubers. Of course, after this, there was no plowing, but up to this time the potatoes had been kept carefully free from weeds. But then, favored by the buckwheat, the weeds grew with surprising rapidity, and soon covered the field. I determined to let them remain, as to pull them up would have disturbed the tubers.

A week since I determined to dig the potatoes—first mowing down weeds and buckwheat, to get them out of the way. The vines were completely dead, and but for the ridge of the rows, it would have been difficult to find them. The tubers I find not to be one-third size, but still perfectly sound—*no rot* being discernible in *any one of them*.

I may farther say that the best seed was planted, large potatoes cut in two or three pieces, and that three years ago, I raised a fine crop on this very ground.

Now, Mr. Editor, I wish to ask you, why these vines of mine died down so suddenly in July, after giving so fair a promise? I cannot make out the cause. Neither can one or two of my neighbors, whose vines were affected in the same way. The soil is dry and needs no draining. They were carefully worked, and the best seed used. I have looked through my agricultural books, but can find nothing on the subject. I have thought it might be a fly or a worm that did the mischief, but unfortunately I had not an opportunity to examine, as, being called away from my farm in the middle of July, I did not return till the end of August, when the mischief was done. I should be pleased to see an explanation of this matter in your magazine—or perhaps some of your contributors can enlighten me?

Would it be safe to use these small potatoes, [stunted I call them,] for seed next spring? Is it possible that I planted them too early for this latitude? or that it might have been an early variety? though they were regular fall seed.

Hoping to hear from you in your next number, I am yours. H. *Trenton, New-Jersey, Oct.* 9, 1852.

The death of the potatoes was undoubtedly caused by the drouth and the too liberal application of guano. The sowing of the buck-wheat was a great mistake, as it absorbed the moisture, which otherwise would have nourished the potatoes, and so increased the drouth. In the summer, the soil is watered to a considerable extent by the dews, which were altogether lost to the potato where the ground was covered by the grain.

Chenango County Fair.

Luther Tucker, Esq.—Thinking that a few facts in relation to the Fair of the Chenango Co. Ag. Society would not come amiss, I attempt a hasty sketch. The Fair was held at Norwich (the county seat.) The grounds contained some six acres, substantially enclosed, and encircled by a nicely graded trotting course one-third of a mile in circumference. At one end was erected a large and commodious building for the exhibition of domestic manufactures, fancy articles, &c. The display in this department, as regards quantity, quality, and arrangement, did honor to the ladies of Chenango. The display of matched and single horses exceeded any ever held, upwards of 60 entries being made in that class. The show of stallions and colts was good. Among those that drew a crowd of admirers was the Boston Belfounder, a very fine horse, owned by H. D. Mead, of Smyrna. He received the first prize in his class.

The show of cattle was large, equaling or exceeding that of Madison, Otsego and Cortland counties. We noticed two very large pairs of stall-fed cattle, one owned by Whitman Willox, of Norwich, the other by Augusta Ross, of Preston; the latter pair were exhibited at the State Fair at Utica. They weigh some 5,000 lbs. per pair. They are grade Durhams. The Durhams were not very numerous. We noticed one fine bull two years old, owned by William Armsby of Otselic; his color is white; weighed when one year old 1,200 pounds. The display of Devons was fine. A Devon bull, owned by Mr. Sexton, of Plymouth, attracted considerable attention. He received the second premium on aged Devons at the State Fair at Albany. We also saw a fine herd of full and half bred Devons, owned by J. W. Collins, of Smyrna, of which one calf took the second prize at the State Fair at Utica, one cow, we think, full equal to anything we ever saw, exhibiting better milking properties than any of this breed which has come under our observation. (I was credibly informed that she had given milk every day since two years ago last March, and raised three calves in the time. She is not capable of being dried off.) A fine pair of steers two years old, owned by N. Sexton, half blood Devons, were very large and fine, weighing 2,600 lbs., grass fed. There were several fine lots of French Merino sheep, which argues well for the spread of this useful animal. Two bucks owned by Mr. Hakes, of Pitcher, sheared 50 pounds—one years growth.

The address, delivered by J. T. Sawyer, Esq., of Clinton, was mainly a description of scientific farming. At the conclusion the awards of premiums were read, and a general rush of the lucky ones followed to receive their premiums. Thus ended the 7th Annual Fair of the Chenango County Agricultural Socity. Yours truly, Agustus. *Smyrna, Oct.* 11, 1852.

Cayuga County Fair.

L. Tucker, Esq.—On the 6th and 7th of October, the Annual Fair in our county was held. The weather was clear, warm and pleasant during the show. All stock and articles for exhibition were kept on the ground both days, which gave great satisfaction to all in attendance, and proved highly advantageous to the committees in giving them an opportunity to review everything on the second day. The number of stock of all kinds, and the articles on exhibition, exceeded those of any previous show by more than one-third. It is estimated that over 6,000 persons were in attendance. The show grounds enclosed fifteen acres, and were completely crowded; in short, the space was too limited to accommodate the farmers. I never saw so many happy faces assembled in my life. The farmers seemed in good spirits, and came in full confidence that they were participating in their great jubilee.

This has been a proud show for Cayuga, and tells well for the enterprize of its farmers. It shows that new light has dawned upon them, and new life been infused into them. J. B. Dill. *Auburn, Oct.* 9, 1852.

Reaping Machines.

Eds. Cultivator—I noticed in your article on the trial of implements at Geneva, you seem to place some reapers entirely above others, merely on account of their being geared higher, which I think if you would take the trouble to consider the matter in its true light, you would see at once that a reaper can have too much motion as well as not sufficient. I have used one for several years, and from experience I am satisfied that a reaper, with just motion sufficient to clear itself at a slow walk, is all that is required to have it do good work, and any motion faster than that causes it to wear out faster and creates more friction, and makes it much more liable to break and get out of order; and if a farmer, using a reaper, wishes to cut 15 or 20 acres of grain per day, he is necessarily obliged to drive his team faster than he would to a plow or drag in order to get over the ground. With one of Hussey's Baltimore Reapers, that has nearly one-third less motion than Hussey's, built at Auburn, I have never found any trouble in cutting any kind of grain at the slowest gait I might cause my team to walk. A Farmer. *Cayuga Co., N. Y., Sept.*, 1852.

Deep Plowing.

The present season of severe drouth, has most distinctly illustrated the benefits of deep plowing. We planted a quantity of apple seeds on ground which was last autumn an old pasture, and which was inverted with a double Michigan plow of the largest size, drawn by three yoke of oxen, to the depth of eleven and a half inches, actual average measurement. On such soils as this, as commonly plowed, apple seedlings usually suffer by drouth, but the present severe season, they have continued growing without the least check, through the whole summer, and are now much larger than usual under ordinary treatment.

The Granite Farmer states that fields tilled only to a depth of six or seven inches have suffered severely, while on others, side by side, the crops do not feel the drouth at all. In one place was a field of corn, of a yellowish green, and with leaves rolled by thirst; while separated only by a single step, was another portion at least a foot taller, with a deep green, broad, and uncurled leaf. Yet the manure was the same, the seed the same, and the culture the same. On asking an explanation, he learned that this was the result of the first experiment in sub-soil plowing.

Construction of Ice Houses.

Eds. Cultivator—Your correspondent, R. R. Wright, of Philadelphia, asks information as to the best construction of a family ice house. If you see fit you may give him that of mine, in which I *now* have ice that was put there nearly five years ago, the annual supply having been added to that nucleus.

My ice house is ten feet cube, six feet below, to four feet above the surface, on the average; on a side-hill declining to the north-east, the ordinary entrance being at that end—that for filling opposite.

I excavated the earth, placed four posts 10 feet long and 10 inches square—lined the outside and inside with two inch plank; filled the space between with tan-bark. Made a double roof by nailing inch boards above and below four inch rafters, and filled the space with straw, shingling the outside, the roof being at a half pitch, and projecting 18 inches on all sides. In the center of the roof, and elevated above, is a ventilator eight inches square. I had an open drain leading from the bottom, where I laid my sleepers, of ordinary fence posts, covered with loose boards, in order that any *liquid may freely run off*, a very important point in the construction of any ice house.

In filling my ice house, I am particular to have all interstices well filled at *every* layer of ice, with well broken pieces, and prefer the *coldest weather* to pack in—a matter more important than *thickness* of ice. While packing, and when full, I throw large quantities of well water, at the lowest possible temperature, over the ice, *on very-cold nights*, leaving front and rear doors open. I cover about middle of March with plenty of shavings, which I regard as altogether preferable to straw or sawdust, especially the former, which I would never use. During the summer I see that the shavings are thrust down at the sides where ice melts.

My ice house is shaded by a building in the rear, and trees at the sides.

I have supplied friends with ice, when every other ice house in the city had given out. H. M. "*Greenvale Farm,*" *Oswego, Sept.* 24, 1852.

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State Fairs.

Ohio.—The fair at Cleveland, on the 15th, 16th and 17th Sept., eclipses all previous triumphs, and shows to a demonstration that Ohio is determined on not being beaten. The amount received for entries and admissions was $13,230.50, and the number in attendance is estimated at from 60,000 to 70,000. There were 375 entries of cattle, 175 of horses, and 200 of sheep. The number of animals on exhibition was, however, much larger, as lots were registered as a single entry. The show of Fine Arts, Manufactured articles, Dairy Products and Agricultural Implements was fine, and much more extensive than ever before. In enterprise and spirited resolution, the farmers of Ohio are eminent.

Michigan.—The Fourth Annual Fair was held at Detroit, on the 22nd, 23rd and 24th of Sept. The Michigan Farmer says of it, "the present show has proved a very auspicious and promising one for the Agricultural interests of the State. There was a marked improvement throughout; especially noticeable in the grade cattle, in horses, and in the department of domestic manufactures." The address was delivered by Justus Gage, Esq., and though of a general nature, is practical, well written, and full of timely suggestions.

New-Hampshire.—The Third Annual Fair was held at Meredith Bridge, on the 6th and 7th Oct., and was creditable to the Granite State. The Granite Farmer, in summing up its description of the show, remarks: "The exhibition as a whole, can hardly be said to have advanced from the last year. In the stock and fruit department, there was a decided advance, but in other departments, a failure to come up to last year's standard was observed."

The Canada Fair.—The annual fair of the Provincial Agricultural Association was held at Toronto, from the 21st of September, continuing four days. In the show of stock, the Durhams predominated. A small herd of West Highland cattle, imported from Scotland, were attractive as curiosities. The agricultural productions were well represented, and are spoken of as very superior. The number of competitors for premiums was large and the fair well attended. In the department of Horticulture, accessions were received from Western New-York, and agricultural implements of American manufacture were shown. The address of the president, T. C. Street. Esq. is complimented in high terms.

American Figs.

The Working Farmer gives the following mode of preparing these, as exhibited by Charles Downing of Newburgh. Other fruits we have known to be successfully dried in a similar way.

"The peaches were first peeled, then cut in halves, the stones removed; next placed on plates, with their hollow sides up, and containing one-sixth of their weight of sugar.

"After having been sufficiently dried in the oven, they are stowed away in jars or boxes, like figs, the texture of which they materially resemble, while their flavor is entirely superior. They may be swollen by water, and used for pies, tarts, &c., and are very superior in quality to the ordinary dried peaches."

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Shoulder-slip in Horses.

Shoulder-slip consists of a rupture, and subsequent wasting of the fleshy fibres composing those muscles which lie outside the shoulder blade, and pass from it to the upper arm bone below. In a healthy condition, the action of these muscles consists in moving the arm bone backwards and forwards, and in keeping its upper end or head in connection with the body when weight falls upon the shoulder joint. The fleshy substance of the muscles is attached to sinews which pass outside of the joint, and add materially to its strength and security, but all motion in the sinews is promoted by muscular or fleshy contraction. If an injury (such as a strain, for instance) should lacerate the fleshy fibres, they cannot, of course, determine any action to their sinews, and the latter become so lax as not to retain the shoulder bones in their natural position during motion; the head of the upper arm bone, in short, slips outward from under the weight, which, if its fleshy and tendinous relations were intact, it would support, and still keep its own proper situation. This rupture of muscular fibres is accompanied by wasting of the fibres themselves; this process is frequently observed in the animal frame, and occurs in parts which are from any cause deprived of their usual functions. The affected shoulder, under the disease in question, becomes consequently much diminished in size, and the wasting being for the most part confined to muscles outside the shoulder blade, the outline of this bone may sometimes be visibly seen. The outward rolling motion of the shoulder joint is greatest when the horse is going down hill, and is sometimes so excessive in a trotting gate, that the animal seems in danger of falling. If sufficient time be allowed, and the horse not put to work too soon, he will usually recover from this affection. Months are sometimes required to ensure complete restoration, and in addition to the rest needed, much benefit is derived from an occasional application of blisters to the whole outer surface covering the shoulder blade, and shoulder joint. Dr. Dick *in North British Agriculturist.*

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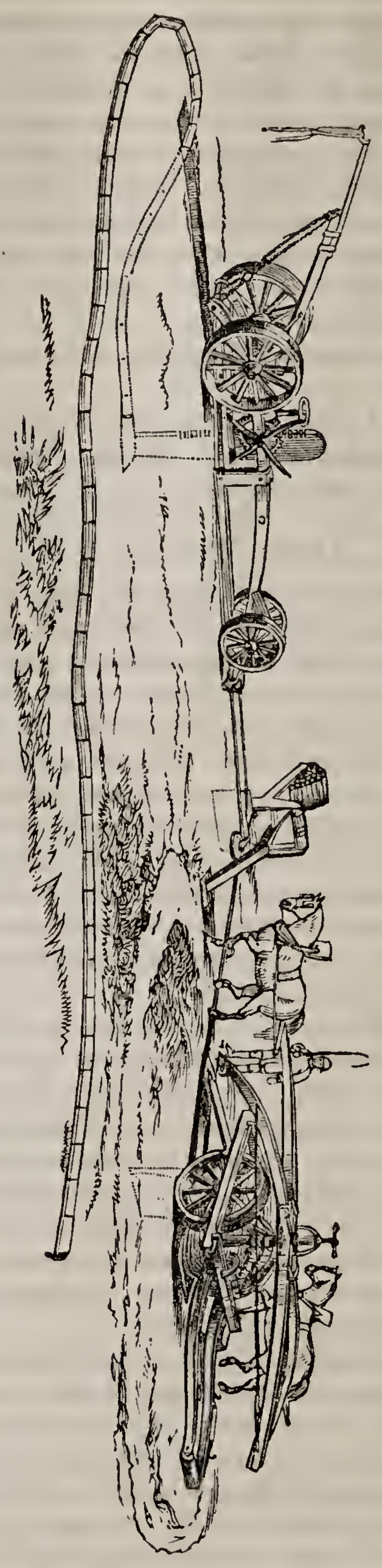
Striped Bugs and Curculio. — Wm. H. Ludlow states in the Working Farmer, that he is uniformly successful in repelling the curculio, by throwing plaster of Paris over the trees just after a shower, or while the dew is yet on. A sprinkling of plaster he says forms a complete protection against the striped bug. These remedies are easily tried, and a *possibility* of success should induce any one to make the experiment.

The Tomato.—It is said that this fruit, which is of very modern introduction into our gardens, has been in long use by the French and Italians—and that among the old French settlers, on the banks of the Kaskaskia, in Illinois, it has been cultivated and used for more than fifty years.

Fowler's Draining-Plow.

One of the most complete inventions of modern times, is the new English Draining-plow, for the annexed engraving, of which we are indebted to B. P. Johnson, Esq. Two horses work at one side of a field at a capstan, and by an almost invisible wire rope, gradually draw towards it a low frame work. Beneath this frame work, extends downwards three or four feet, a strong coulter, at the bottom of which is a metallic plug, which moving forwards, forms a horizontal hole through the sub-soil. To the back end of the plug is attached a rope, on which tubular tile has been strung; thus the tile are drawn in and fitted to the drain thus formed, as fast as the frame-work moves forward. The only trace left on the surface of the field is a narrow slit made by the coulter, while an invisible drain has been formed under the feet. Hence, the operation of draining may be performed without injury to any short crop which may be upon the field. When the surface is undulating, a most ingenious contrivance preserves a perfectly straight and uniform slope to the drain. The coulter is worked up and down by the man who stands on the frame, by means of a screw and wheel, (like the brake-wheel on a rail-car,) his eye being guided by a try-sight on the frame, and a cross-staff at the end of the field. Drains forty rods long are completed at one operation; strings of pipe, each 50 ft. long being successively added, and when done, the whole rope is withdrawn. Pusey's late report on this machine, published in the Journal of the Royal Agricultural Society, is quite favorable. It has been fully proved that in suitable land, the cost of draining need not be more than 30 English shillings per acre, or one-half the usual expense, and about one-third the expense in this country where labor is more costly.



Fowler's Draining Plow.

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Hon. Horatio Seymour's Address

At the State Fair at Utica, 1852.

After alluding to local associations, which render memorable the place of the Fair, the orator divided the history of farming into two eras, that of the axe, and that of commercial farming. He spoke in terms of the highest eulogium of the heroic spirit which characterised the pioneer settlers of the country, of the toil and privation they endured, and of the rich legacy they left their more favored descendants.

Speaking of the present age, he says,

"The extension of facilities for conveying the productions of our soil to the markets of our own country, and those of the commercial world, has not only enlarged the area of agricultural pursuits, but by giving to our farmers an unlimited cash market, has also made essential to success certain principles which would have been injurious during the period I have described. It involves many considerations of great interest and value, and deeply affecting the social and economical conduct of agricultural labor. At an early period, "production for self consumption," was the leading purpose; now, no farmer would find it profitable "to do everything within himself." He now sells for money, and it is his interest to buy with money every article that he cannot produce cheaper than he can buy. He cannot afford to make at home his clothing, his furniture, or his farming utensils; he buys many articles for consumption for his table. He produces that which he can raise and sell to the best advantage, and he is in a situation to buy all that he can purchase cheaper than he can produce. Time and labor have become cash articles, and he neither lends nor barters them. His farm does not now merely afford him a subsistence; it produces capital, and therefore demands the expenditure of capital for its improvement.

"An extended cash market also enables him to simplify his processes. He can now take advantage of the principle which lies at the foundation of success in commercial and manufacturing pursuits, of "doing one thing, and doing it extensively and well."

Confining his attention to one subject from year to year, he becomes skilled in his peculiar pursuits, and methodizes and cheapens his processes. Informed with regard to the markets, he learns to follow his productions into the open markets of the world; trace them, perhaps, to the shores of Europe, and thus is lead to inform himself more thoroughly in relation to the principles of commerce, the laws of trade, and the tastes and habits of his customers.

The world has never been so highly Commercial as it is at this time; never has intercourse between the nations of the Earth been on so vast a scale; and the farmers of New-York, by the instrumentality of railroads, canals and steamships, are brought within its vortex. The tendency of this is not only to disseminate intelligence, but it renders varied information indispensable. The affairs of the whole commercial world blend themselves with our Agriculture and give to this pursuit a scope and relationship that demand and produce varied intelligence; men enlarge their capacities and improve with their pursuits. The circle of the farmer's dealings is not now limited to his neighbors and the next merchant; it is extending itself into all quarters of the globe.

" In the great struggle which is going on among the nations of the earth for commercial supremacy, the farmers of this country are to bear an important part. They furnish the freights which send our vessels into every quarter of the globe; their pursuit is of the highest and first necessity to all other departments of business; if it languishes they suffer; and if it prosper, they are successful. The increased intercourse among nations, the modifications of revenue laws, and improvement of ships, and the introduction of steam upon the ocean, have brought us into close competition with Europe. Interest, pride and patriotism make us view the result with deep solicitude. How are we prepared for the contest? In estimating ourselves we must not fall into the common error of comparing ourselves with what we were.

" The world will not permit us to be judged by such standards. We have arrived at that condition when we cannot, with self-respect; ask any allowances in our favor. The stern question now to be met is not what we are, or shall be, in comparison with the past; but what we ought to be with our present opportunities.

" General prosperity, or that of classes, is the result wrought out by the efforts of the people, directed by an intelligent public sentiment. Yet we all influence this sentiment, and the workings of each individual mind constitutes a part of its volume. It has frequently been changed by one man's efforts. It is constantly influenced by those who boldly and manfully address themselves to the duty of advocating truth or combatting errors. Engaged in designs of usefulness or benevolence, we may all, by the exercise of energy and perseverance, wield it as an instrument to effect our ends. Would you render your beautiful hills and valleys still more attractive and productive, clothing them with a rich verdure and ornamenting them with tasteful abodes and sylvan adornments of shrubs and trees, animate your agriculturist by holding his manly and noble pursuit in proper estimation. Would you become a wealthy community, and do you desire to introduce among you the products of mechanical skill? Arouse the public interest and put forth the efforts, and the living streams of your hills, converted to means of service, will in the morning leap forth to their labors, and in the evening glide on to their rest. Does a more lofty ambition influence you? Would you diffuse around you the blessings of Education? Would you fill the mind of Man with constant objects of thought and reflection; would you give a new interest to everything around him, (for when you educate a man, you open the eyes of the blind) by calling his attention to all the wonders and beauties of the vegetable world, and teaching to investigate and ponder over Nature's endless variety and strange processes; or arouse his faculties to the utmost stretch of their powers by calling upon him to measure the orbits of other worlds to compute their distances and to conceive their sizes; or startle him by pointing out the traces in your hills and mountains inclosed within the strata of enduring rocks as within the leaves of a mighty record, showing the former convulsions of our earth; that it has been moulten with raging fires, swept with great floods, and has been the abode of monsters more vast than the most morbid imagination had conceived? Would you store his mind with all these wonders, elevate his conceptions, endow him with wealth not subject to fickle Fortune's changes? Give to Learning its appropriate honors. Let the value of education and learning be properly estimated, and we shall not regard them merely as means by which we shall be rendered successful as farmers, mechanics or professional men; but while they will render these pursuits successful, they will lead us to regard them as means, not ends; as paths which we tread in compliance with the divine fiat which makes the journey of life one of labor, but which we also may make a road of self-improvement and public usefulness.

" If we reflect upon the prospects of our own great State, we shall see that the present is an era in the history of its progress; a point of time from which we shall have to contend with intelligent zeal for the preservation of present advantages, and for the promotion of its great interests."

Referring to the bearing of science on Agriculture, he makes the following just remarks:

I think the advances which are made, are much greater than we suppose. Scientific knowledge, when it comes forth from the laboratory or study, is clothed with a nomenclature so stiff and forbidding that it is somewhat repulsive; but by the aid of popular discourses, Agricultural Societies, and, above all, of the Press, it is gradually popularized, expressed in more familiar terms, and becomes a part of that general intelligence we all possess.

After speaking of the natural advantages of the State of New-York, the necessity for increased skill and attention on the part of the farmer, and the importance of the diffusion of learning, he concluded with the following:

" However great our natural or acquired advantages, they alone will not sustain us against foreign or domestic competition; but reliance must be placed only upon the intelligence and industry of the cultivators of the soil, and, above all, that success in this pursuit, as in all others, depends, in a great degree, upon the estimation in which this most noble and important occupation is held by themselves and the community at-large. It is this last consideration that has induced the officers and members of the Society to devote themselves to its concerns, and to the toil incident to such exhibitions as those we see around us. They feel that it has been true at all times, in all conditions of society, that those pursuits are successfully prosecuted which are held in high esteem by society at large. It is to manifest this regard that the Executive of our State, its public officers, and other distinguished men from all parts of our country, try, have attended on this occasion It is this consideration that has induced me to appear before you to-day, conscious of my inability to instruct this audience on the processes of farming, although I am somewhat engaged in its concerns, to make the remarks I have submitted to you.

" They may be unsound and valueless, but they are offered as a tribute to the importance, the dignity and value of the Farmer's occupation."

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Points of a good Hog.

I could caution the reader against being led away by a mere name, in his selection of a hog. A hog may be called a Berkshire or a Suffolk, or any other breed most in estimation, and yet may in reality possess none of this valuable blood. The only sure mode by which the buyer will be able to avoid impositions is, to make name always secondary to points. If you find a hog possessed of such points of form as are calculated to insure early maturity, and facility of taking flesh, you need care little what it has seemed good to the seller to call him; and remember that no name can bestow value upon an animal deficient in the qualities to which I have alluded. The true Berkshire—that possesses a dash of the Chinese and Neapolitan varieties—comes, perhaps, nearer to the desired standard than any other. The chief points which characterize such a hog are the following: In the first place, sufficient depth of carcass, and such an elongation of body as will insure a sufficient lateral expansion. Let the loin and chest be broad. The breadth of the former denotes good room for the play of the lungs, and a consequent free and healthy circulation, essential to the thriving or fattening of any animal. The bone should be small and the joints fine—nothing is more indicative of high breeding than, this; and the legs should be no longer than, when fully fat, would just prevent the animal's belly from trailing upon the ground. The leg is the least profitable portion of the hog, and we require no more of it than is absolutely necessary for the rest. See that the feet be firm and sound; that the toes lie well together, and press straightly upon the ground; as also, that the claws are even, upright, and healthy. Many say that the form of the head is of little or no consequence, and that a good hog may have an ugly head; but I regard the head of all animals as one of the very principal points in which pure or impure breeding will be the most obviously indicated. A highbred animal will invariably be found to arrive more speedily to maturity, to take flesh earlier, and with greater facility, and, altogether, to turn out more profitably, than one of questionable or impure stock; and such being the case, I consider that the head of the hog is, by no means, a point to be overlooked by the purchaser. The description of head most likely to promise, or rather to be concomitant of, high breeding, is one not carrying heavy bone, not too flat on the forehead or possessing a too elongated snout—the snout should be short, and the forehead rather convex, curving upward; and the ear should be, while pendulous, inclining somewhat forward, and, at the same time, light and thin. Nor should the buyer pass over even the carriage of a pig. If this be dull, heavy, and dejected, reject him, on suspicion of ill-health, if not of some concealed disorder actually existing, or just about to break forth; and there cannot be a more unfavorable symptom than a hang-down, slouching head. Of course, a fat hog for slaughter, or a sow heavy with young, has not much sprightliness of deportment.

Nor is color altogether to be lost sight of. In the case of hogs I would prefer those colors which are characteristic of our most esteemed breeds. If the hair be scant, I would look for black, as denoting connection with the Neapolitan; but if too bare of hair, I would be disposed to apprehend too immediate alliance with that variety, and a consequent want of hardihood, that, however unimportant, if pork be the object, renders such animals hazardous speculations as stores, from their extreme susceptibility to cold, and consequent liability to disease. If white, and not too small, I would like them as exhibiting connection with the Chinese. If light or sandy, or red with black marks, I would recognize our favorite Berkshire; and so on, with reference to every possible variety of hue. These observations may appear trivial; but they are the most important I have yet made, and the pig buyer will find his account in attending to them. —*Rural Hand Book.*

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On the Joint Worm.

In our volume of last year (p. 321) we published a letter from Alex. Rives, Esq., of Virginia, giving an account of the ravages of the "Joint Worm," on the wheat crops of that State, together with a letter from Dr. Asa Fitch, of Salem, giving his views in relation to the character of the insect. In the last *Southern Planter*, we find the following letter, on the same subject, from Dr. Harris, of Cambridge:

The peculiar disease now affecting wheat in Virginia, seems to be of the same nature as that which attacked barley in Massachusetts above twenty-five years ago. This disease consists of hard, woody, gall-like tumors on the stem of the plant situated mostly in the sheathing bases of the lower leaves, or in the second or the third joint, more rarely in the substance of the stem itself. On being opened, these tumors are found to contain several little yellowish white maggots, called joint worms in Virginia, each lodged in a separate cell rather larger than its own body. These tumors, by their pressure and hardness, obstruct the circulation, obliterate the hollow of the stem, and prevent its due development, thereby greatly reducing the amount of the crop. The greater part of the maggots remain unchanged in the tumors through the winter, and in the following months of May and June are transformed to tiny, blackish, four-winged flies, belonging to the genus *Eurytoma*. Prof. Cabell has ascertained that a very few undergo this change during the first summer. When first observed in Massachusetts, these insects were supposed to be parasites, in accordance with the known habits and history of others belonging to the same family; and it was thought that the real culprits would be found to be some species of *Cecidomyia*, or small flies resembling the Hessian fly and the wheat fly. Hitherto, however, no species of *Cecidomyia* has been obtained from the diseased barley straw in Massachusetts, or from the diseased wheat straw of Virginia. On the contray, both, in repeated instances, have furnished large numbers of the same kind of *Eurytoma*. If, then, this insect be the sole cause of the disease, as Prof. Cabell and others are inclined to believe, it becomes important to consider whether the history of the insect will suggest any means for diminishing or arresting its ravages.

As the disease is seated near the base of the straw, in or near the second or third joint, the greater part of the diseased portions will be left in the stubble when the grain is reaped. This fact has been noticed in barley fields in Masachusetts, and doubtless occurs also in the wheat fields of Virginia. Most of the insects remain unchanged in the stubble till the following year. If, then, we can destroy the maggots remaining in the stubble in the field, before they have completed their transformations and made their escape, we shall, in great measure, restrain their further propagation and increase; for it is in the winged state that insects propagate their kind. It has been found in Massachusetts, that plowing in the stubble has no effect upon the insects, which remain uninjured under the slight covering of earth, and easily make their way to the surface when they have completed their transformations. The only practicable way of destroying the insects, is to *burn the stubble* containing them. Some few may complete their transformations and take wing during the first summer, before the grain is reaped, and will thereby escape being burnt with the stubble; and these, if allowed to increase, will suffice to continue their race. The remedy suggested, to be successful, must be followed up in several successive years, and if generally adopted, and thoroughly and carefully employed, cannot fail to exterminate the *Eurytoma*.

Highly manured and thoroughly tilled fields, by promoting a rapid and vigorous growth of the plant, may render it less liable to suffer from the attacks of the insect. Large fields, well seeded, will probably escape better than those that are smaller and thinner sown, in which the insects, when about to lay their eggs, can penetrate easily and to a greater extent. Thaddeus William Harris, M.D. *Cambridge, Mass., Aug.* 18, 1852.

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Agriculture of Jefferson County.

We have been favored with the Address of J. A. Sherman, Esq., President of the Jefferson Co. (N. Y.) Ag. Society, at its late Fair, together with the report of the viewing committee, from which we make the following extracts:

Products of Jefferson County.—A half century has now passed since the pioneers of our county first trod upon its fertile soil, and the sound of the white man's axe first echoed through its then dark and wilderness forests. Comparatively, few of those early settlers are left among us; they were our fathers and our forefathers, our mothers, our brothers and our sisters. They prepared this wide and fertile field, and we are left to reap and enjoy its harvest. Yes, gentlemen, through your hardships, toils, and privations, through your energy and perseverance, by the labor of your hands and from the sweat of your brows have those unbroken forests been changed into fruitful fields and smiling meadows. The seven hundred and thirty-three thousand acres which comprise the limits of our county, now contain some seventy thousand inhabitants, and the valuation of its real and personal estate amounts to *over twenty millions* of dollars. Upon its green pastures now feed some eighty thousand head of cattle, 16,000 horses, 60,000 sheep, and the yearly production of her dairies amounts to some eight million lbs. in very nearly equal quantities of each, which at an average rate of sales, say 6c. for cheese and 16c. for butter, would amount to the sum of $880,000.

From her golden harvests are annually gathered some 280,000 bushels of wheat, 70,000 of rye, 370,000 of Indian corn, 450,000 of oats, 230,000 of barley, 180,000 of peas and beans, and some 150,000 tons of hay. Thus, gentlemen, in the short space of fifty years has been changed a wilderness country, inhabited only by the uncivilized red man and wild beast of the forest, to one of the most productive in agriculture, and exceeding in the number of her farmers by some two thousand any other county in the entire State. Through her towns and flourishing villages are erected some four hundred district school houses and academies, where, the youth of our county are taught the first rudiments of learning, also the more advanced through the higher branches of a common education. The fostering and promotion of those institutions, gentlemen, should be our glory and our pride; they are the nurseries of patriotism, and the very fortress of our liberties.—*Mr. Sherman's Address.*

Cultivation of the Cranberry.—It is believed to be in keeping with the objects of this society, to encourage new enterprizes, that open new fields of labor, and promise new sources of profit to the active industry of the County. In accordance with these views, your committee would recommend to the favorable consideration of the society the cultivation of the low Cranberry. Our attention was directed to the subject by the examination of a small platt of this fruit, planted by Mr. David Grummond, of Adams. This experiment of Mr. Grummond, appears to be entirely successful, and seems to indicate that the Cranberry may be cultivated successfully in our climate, and we see no reason why this may not be so, as the plant is indigenous to the county, and is found growing spontaneously on some of the low lands bordering the lake. This fruit sells readily in the markets of the Atlantic cities, and cannot fail to be a source of profit to him who succeeds in its cultivation. The swamps and marshes of the county which are now of but little or no value, are undoubtedly the best adapted to its culture, and by the means of this fruit may be the most profitable portion of our land, and as there are other experiments in the county in the process of developement, your committee, with a view to their encouragement, would suggest the propriety of offering a premium next year, for the most successful experiment in the cultivation of this fruit.—*Report of V. Com.*

Large Poultry Establishment.—Under the head of new enterprizes, your committee would call the attention of the society to the aviary of Mr. Orville Hungerford, located in the town Hounsfield. Mr. Hungerford has enclosed ten acres of land with a strong picket fence, and erected buildings and other fixtures on the premises for the accommodation of five thousand hens, at a cost of three thousand dollars. These buildings are divided into rooms for the accommodation of his birds, suited to their various wants, the whole to be raised by artificial means to the temperature of summer heat during the winter. Your committee possess no data on which to base an opinion of the probable profits of the establishment and can only hope that, as it is desirable to multiply the ways and means for the consumption of the coarser grains grown in the county without submitting them to the process of distillation, it will prove a source of profit to its enterprizing founder, and that it will not long remain the only establishment of the kind found in the county.—*Ib.*

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Rapid Growth of a Cucumber.—Hovey's Magazine gives an experiment performed by J. McDonald, in Florida, by planting cucumber seed in hills manured with poudrette. From one plant, *six dozen* cucumbers were cut at one gathering.

Sale of Imported Cattle—Great Prices.

The sale of the Scioto Importing Company's cattle, advertised in our last paper, took place at Chillicothe, according to appointment, on the 7th inst.; and for the number, wealth and spirit of the bidders and the high prices obtained for the animals, we doubt whether this sale has ever been equalled in the United States.

Animals sold, price, and names of purchasers.

Nobleman—20 months, $2,510, J. Vanmeter, Pike co.
Master Bellville—2 yrs , $2.210, Geo. Renick, sr., Ross co.
Lord Nelson—2 years, $1,825, J. L. Myers, Fayette co.
Alderman—3 years, $1,100, A. Waddle, Clark co.
Gamboy—20 months, $1,400, M. Sullivant, Frank. co.
Count Fathom—14 months, $2,175, N. Perrill, Clinton co.
Young Whittington—11 months, $450, A. Walls, Ross co.
Rising Sun—8 months, $1,300, G. W. Herrodth, Scioto co.
Isaac—2 years, $600, G. W. Gregg, Pickaway co.
Moss Rose—(cows) 6 years, $1,200, A. Waddle, Clark co.
Strawberry—4 years, $1,000, G. W. Renick, Ross co.
Raspberry—2 years, $1,100, G. W. Gregg, Pick. co.
Sunrise—3 years, $1,230, J. I. Vanmeter, Pike co.
Mary—2 years, $1,650, Alex. Waddle, Clark co.
Enchantress—2 years, $900, Alex. Renick, Ross co.
Blue Bonnett—2 years, $1,225, Felix W. Renick, Pick. co.

The foregoing embrace all of the recent importation, except one young bull (Adam) not recovered from the effects of the voyage, and which is to be sold within 30 days. It is at the farm of M. L. Sullivant, near this city. The sixteen animals sold amount to $21,885—averaging $1,367 each; and as several were injured or otherwise defective, and a majority not half grown, it must be admitted that the prices obtained are without a parallel.

It is true that a majority of the purchasers are shareholders of the company, and consequently interested in the sales, but we are assured that most of the animals could have been sold almost as high to persons not members of the company, and no stockholder was under any obligation to purchase in order to obtain his full share of the proceeds.

A number of bidders were present from Kentucky, and also from distant parts of Ohio, but the prices went entirely above their ideas. All the purchasers are residents of the territory embraced in the Scioto Valley. Each of the individuals named as purchasers is the representative of a company of neighbors clubbed together for the purpose, except Mr. Sullivant, and perhaps one or two others.—*Ohio Cult.*

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Superphosphate of Lime, &c.

Eds. Cultivator—My object in writing at this time, is to obtain information through the columns of the Cultivator, if any of your subscribers have had experince in the practical use of the superphosphate of lime, as prepared by Professor Mapes or Deburg, as a top-dressing for meadows, and also as applied to corn. Any information, with regard to the use of this manure, and the probable or exact amount of increase in either or both the above named crops, will be most thankfully received by at least one of your subscribers.

Also, where a good machine for sowing plaster can be obtained, and the price, (which, by the way, I wonder all manufacturers and others advertising implements, &c., for sale, do not give.) If advertisers would invariably give the prices of their wares, it would save a deal of trouble, and secure them many sales which they otherwise lose. Yours, &c., Enquirer. *Richfield Springs, Oct.*, 1852.

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Quantity of Cattle Food.—It is found by experience that the food of healthy oxen, of whatever size, is nearly one.fifth of their own weight of turneps daily, or about one-fiftieth of their weight of hay, straw, or other dried food. So says Finlay Dan, of Scotland, and he received a gold medal for his paper on this subject.

Diseases of Plants.

The Farmer's Magazine for October, contains an article on this subject, from which we condense the following:

All we really know is this: Plants are, the more we grow them, and the greater the produce of them, more and more liable to disease. The principle is one somewhat difficult to understand, to those who have narrow views of the operations of nature; but to those who look at things more as they are, it is a part of a great plan—a link in the chain of causation, perfectly explicable. An analogy to diseases in plants may be found in a crowded city. It is always a conglomeration of disease and death. In prisons, hospitals and penitentiaries, a disease trifling in an isolated home, may become dangerous and run into epidemics; to the crowding of luxuriant plants and high cultivation *renders them liable to disease.*

The potato is a most striking case in point. It is by cultivation carried away from its natural wildness, till it becomes almost another kind of plant. In Peru, its native country, it is found not more than three inches high, with large flowers, and tubers the size of a hazel nut. Now, by cultivation, the flowers become insignificant; the stem increases in size, and the tubers enlarged to a weight of sometimes three or four pounds, and instead of a straggling plant here and there, thousands of acres are covered with the plant, to the exclusion of almost every other. Nature revolts at this overpeopling with rank potatoes. Some weakness of the plants; some atmospheric cause dissolves the vital power, which holds the chemical particles together; and we have dissolution and decay irremediable.

Take the vine, carried by man from its native wildness, clustered together in fields, nay in forests, excited by manure, protected by glass, pruned by science, so as to increase the juicy fruit nearly six times; it shows revolt by this forcing, and a vast disease has destroyed the fruit, and threatens to be the death of the vines themselves. It is the cholera of the crowded vinery, as much as the plague ever visited Hull, or Leeds, or London.

A disease is now very prevalent in turneps. On the best turnep soils, with the highest of farming, and with plants absolutely the most promising, a flag in the leaves is discovered some sunny day, and by and bye the plants wither and die; they are first a mass of thickened and carbuncled roots, and then an accumulation of disgusting corruption, while weeds, triumphing over this death of the race which had displaced them, seem to run riot on the death of the turnep.

What we wish to urge is, that all investigations be carried on in a large spirit, not looking merely at a particular crop attacked with a peculiar disease, but inquire if all our cultivated crops are not more liable to some disease than they were. Whether it is a cause or effect we know not, but we mean that this spirit should animate those who seek for information.

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To transplant evergreens, one point attended to will result in success—neglected, in failure—this is, removing plenty of earth with the roots.

Banking round young trees a foot high in autumn is an infallible remedy against mice.

Mr. Vail's Cattle Sale.

The public sale of Mr. Vail's fine herd of Durham cattle, took place at his farm near Troy, on the 13th of last month. Though the attendance was not large, the bidding was more spirited, and the prices averaged much higher than at any previous sale ever held in the State, as will be seen by the annexed list:

1.	Yarm Lass, 3½ years, Messrs. Reber & Co., Ohio,	$670
2.	Yorkshire Countess, 2½ years, do. do.	580
3.	Yorkshire Countess 2nd, calf, Capt. A. Root, Ohio,	315
4.	Hilpa 1st, 12 years, Messrs. Reber & Co., Ohio,	320
5.	Hilpa 2nd, 4 years, Gen. Geo. Cadwallader, Phil.,	260
6.	Hilpa 3rd, 2 years, do. do.	360
7.	Hilpa 5th, calf, Capt. A. Root, Ohio,	260
8.	Lady Barrington 5th, 4 years, Gen. Geo. Cadwallader, Phil.	320
9.	Lady Barrington 7th, 1 year, H. & R. M. Watts, M. P., Canada,	240
10.	Butter Cup 2nd, 5 years, Mr. O'Harra, Madison co., N.Y.,	200
11.	Betty, 7 years, Gen. Cadwallader, Phil.,	150
12.	Betty 2nd, 4 years, Mr. D. A. Baker, Ohio,	110
13.	Betty 3d, 3 years, calf, Gen. Geo. Cadwallader, Phil.	75
14.	Bellflower, 13 years, T. S. Halton, Vt.,	75
15.	Laura 2nd, 3½ years. Mr. H. Parsons, Canada,	125
16.	Laura 3d, calf, Richard H. Dulany, Esq., (from the South,)	100
17.	Cherry, 7 years, Wm. K. Gaston, Esq., New-Jersey,	100
18.	Esterville 3d, 6 years, L. Spencer, Esq., Westchester, N. Y.	610
19.	Esterville 4th, 2 years, Messrs. Reber & Co., Ohio,	405
20.	Willey 7th, 5 years, O. Slate, Jun. Esq., N. Y.	260
21.	Willey 8th, 2 years, Gen. Geo. Cadwallader, Phil.,	160
22.	Lady Ann, 2 years, H. Parsons, Esq., Canada,	130
23.	Weldham, 6th, 2 years, Hon. Adam Ferguson, Canada,	275
24.	Eunice 4th, 4 years, Mr. D. A. Baker, Ohio,	125
25.	Eunice 5th, ½ year, Harvey Ingersoll, Esq., Phil.,	120
26.	Aurora 2d, 9 years, do do.	90
27.	Aurora 3d, 4 years, Giles Boult,	65
28	Aurora 5th, calf, Richard H. Dulany, Esq., (South,)	80
29.	Cherry 3d, 6 years, Giles Boult, Ohio.	75
30.	Cherry 4th, 1 year, Capt. A. Root, Ohio,	75
31.	Cherry, 5th, calf, L. Spencer, Esq., Westchester, N. Y.,	110
32.	Snowball, 3 years. Not sold.	
33.	Blossom, passed, not sold.	
34.	Blossom 2d, calf, Gen. Geo. Cadwallader. Phil.	65
35.	Lilack 3d, 4 years, Or Slate, Jun. Esq., N. Y.,	80
36.	Ella, 4 years, Mr. Giles Boult, Ohio,	120
37.	Bellflower 3d, calf, Linus Birdseye, Conn	55
38.	Salley, not sold.	
39.	Earl Derby, 1 year, Messrs. Reber & Co., Ohio,	570
40.	Kirkleavington 2d, 1 year, O. Slate, Jun. Esq., N. Y.,	380
41.	Kirkleavington 3d, calf, Mr. Calkins, Madison co., N. Y.,	220
42.	American Comet 2nd, 1 year, Capt. A. Root, Ohio,	130
43.	American Comet 3d, calf, P. Lathrop, Esq., Mass.,	125
44.	Prince of Wales, 1 year, Harry Ingersoll, Esq., Phil.,	95
45.	Prince of Wales 2nd, 1 year, Mr. Bullock, Albany co,,	50
46.	Mount Hope, 1 year, Linus Birdseye, Esq,, Conn.,	90
47.	Sir Arthur, Not sold.	
48.	Earl Piercey. Not sold.	
49.	Prince Albert, 3 years, Mr. W. Peck, N. Y.,	155
50.	Dairyman, calf, H. Parsons, Esq., Canada,	150
51.	Red Rover. Not sold,	
52.	Trafalgar, calf, H. Morris Esq., Westchester, N. Y.	110
53.	Blanch Rose, 3 years, H. Morris, Esq., do.	76
54.	Skylark, 6 years, W. R. Gaston, Esq., N. Jersey,	75
55.	Lauderdale. Not sold.	
56.	Venus, 1 year, L. Birdseye, Esq., Connecticut,	75
57.	May Flower. Not sold.	
58.	Butter Cup 3d, calf, Mr. O'Hara, Madison Co.	50
59.	Lilack 4th, calf, Gen. Geo. Cadwallader, Philadelphia,	50
60.	Enchanter, calf, Peter Keese, Esq., Essex, N. Y.	100
61.	Sir Walter, calf, Harry Ingersoll, Esq., Philadelphia,	20

It will be seen by the above, that 32 cows and heifers, averaged $201.62½ each,	$6,430
Eight heifer calves averaged $129.37½,	1,035
One three year old bull,	155
Six yearling bulls averaged $219.16⅔,	1,315
Six bull calves averaged $120.83,	725
Average of the 53 sold, $182.64 each,	$9,660

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Black Knot on Plum Trees.—C. M. Hovey informs us in his Magazine, that the practice of Joseph Stickney, of Watertown, Mass., is to cut off the black knots on his plum trees as fast as they grow, and bp constant perseverance, the evil has nearly or quite disappeared. We are glad at all times to furnish additional proof of the success of this mode of treatment, which we have long practiced with success.

ANSWERS TO INQUIRIES.

Sowing Clover with Corn.—"What is your opinion of the practice which some have recommended, of sowing clover with corn—if to be depended on, it would sometimes be very convenient to seed in this way." *R. G.*

To be successful, the clover seed must be sown as early as practicable—and so as to be buried by the last cultivating. If the corn is early planted, the soil not subject to become very dry by severe drouth, and the last dressing be given rather early, there will be a probability of success. But if not sown till about the time that midsummer drouth commences, the seed will be only wasted.

Plums on Light Soils.—"Will you please give me a list of such plums as have been found to succeed best on a light sandy or gravelly soil?" *P. W. W.*

The following are perhaps the best. Imperial Gage, Lombard, Smith's Orleans, Cruger's Scarlet, Lawrence Gage, German Prune.

The Pear, sent us for a name by "R. H.," Auriesville, was the *Gansel's Bergamot.*

Early Potatoes.—L. B. The best early potatoe for general culture grown in this vicinity, is the "Mountain Junes." It is both good and productive. They can now be had for 50 cents per bushel.

Hops and Barley.—A. G., Warren, Ohio. We are not sufficiently acquainted, either with the state of these crops, or the present and prospective prices, to answer your questions. The reason that we have had so little in the Cultivator in relation to hop culture, is simply because we have not been able thus far to induce those engaged in it, to communicate their experience to the public. We shall be greatly obliged to any one of our readers, who will give us, from his own experience, an article on the culture of the Hop.

Plan of a House.—We advise "Levi Snooks, Jr.," to apply to an architect for the plan of such a house as he wishes to build. It is not in our province to furnish plans for individual and particular situations. All we can do, is to furnish plans and suggestions for general use, leaving it to professional architects to arrange the variations and details necessary for particular locations and purposes.

Dorkings—Query.

Messrs. Editors—Will you please inform your readers whether the presence of *a top-knot is evidence of impurity of blood in Dorking fowls?* I have a beautiful yard of chickens of that variety, bred with great care, from stock of supposed purity of blood; and I notice that many of them show a small tuft of feathers on the head. I am unwilling to furnish any of them to my friends as pure blood, if they are not so. A Subscriber.

We prefer to refer the above question to some one more familiar than ourselves, with the characteristics of a pure bred Dorking, and hope some of our correspondents will enlighten "A Subscriber" on the subject.

NEW PUBLICATIONS.

Transactions of the Wisconsin State Ag. Society for 1851.

We are indebted to the politeness of the Secretary of the Society, A. C. Ingham, Esq., for a copy of the first volume, which appears in a neat and substantial form. The matter throughout is of permanent value, and affords ample proof that Wisconsin is resolutely and successfully at work in elevating the standard of her agriculture. The reports of the several county societies contain very much interesting information with regard to the nature of soils in different parts of the State, the crops most successfully grown, and the degree of culture attained in the various sections. There are excellent communications on subjects connected with farm management, from gentlemen in other States. The volume shows the hand of a diligent and careful editor, and reflects credit on the Society and the State.

Parisian Sights and French Principles. Harper & Brothers, New-York.

This book admits one into French houses, and shows up their social and private life, as seen through "American spectacles."

There are some interesting pictures of society, to say nothing of strangely grotesque vagaries, which could occur nowhere else than in Paris. French principles are characterised by general infidelity, or only a negative belief. This is why France is so unstable—she derides a great many opinions that she considers false, but recognises very few as true. The volume is a desirable one, and only censurable on the ground that "familiarity breeds contempt."

Harper's Magazine for October, presents its usual array of good reading and fine illustrations. The series of articles on the Holy land, by Jacob Abbott, are deeply interesting and instructive. There are no better specimens of metaphysical and moral essays extant than those which appear in the Editors' Table. Its monthly edition is 100,000 copies.

Littell's Living Age. E. Littell & Co., Boston, Mass.

This weekly publication maintains its interest and deserves the support it receives. The prevailing topics of literary interest are in it, the rarest gems of poetry, and the more exciting subjects of political contest. It is a true exponent of the literature, the sound sense, and sober thought of the day, and as such should be on the table of every well informed man.

Grahams' Magazine. George R. Graham, Philadelphia.

The Nov. No. of this companion of the library and parlor is on our table, in advance of its date. We notice a finely illustrated and well written article on Rivers, by Thos. Milner, who has of late contributed several valuable papers to this publication. The original matter is uniformly of more than ordinary merit, and its selections are well chosen.

Egg Physiology.—In answer to the inquiry, whether cocks are necessary in the egg business for market only, the Granite Farmer states the following circumstance: Three canaries, with males, laid about 20 eggs each during summer, they not being allowed to hatch them. A female bird in the vicinity, "a genuine lone bird that has mourned her mate which she never had," laid about the same number of eggs during the same time.

NOTES FOR THE MONTH.

Our Arrangements for 1853.

It will be seen, by the prospectus on the last page of this number, that we propose hereafter, in connection with "The Cultivator," to issue a weekly journal, to be called "The Country Gentleman—*A Journal for the Farm, the Garden, and the Fireside.*" Believing that such a journal as we intend this shall be, would prove a valuable auxiliary in the cause of agricultural improvement, and the promotion of rural art generally, we have for some years had the project in contemplation, but the time has not before arrived, when we could see our way clearly to carry it into successful operation. Our preparations are now made, and with confidence we invite the attention of the public to our plan, as explained in the Prospectus. We hope to make The Country Gentleman, such a journal as will meet the wants and approval of our rural population generally. A sample number is now in press, and will be sent to all who desire it.

The Cultivator for 1853.

The Price Reduced to Fifty Cents a Year.

As the Cultivator will hereafter be issued in connection with our proposed weekly paper, we are enabled to reduce the price to fifty cents a year to single subscribers, and to thirty-seven and a half cents to clubs—while at the same time, we shall have it in our power to give increased interest and value to its pages; from the fact, that its contents will be made up, mainly, of the choicest articles which appear in the several Nos. of the weekly paper during the month. There will be no change in its character. Its object—"To Improve the Soil and the Mind"—will be the same as heretofore.

The only variation will be in the price. This change will procure for it, we have reason to believe, a greatly extended circulation, and consequent increase of usefulness.

Frirnds!—Our plans for next year, are before you. Will you examine them, and if they meet your approbation, as we trust they will, give us your hearty and energetic co-operation in carrying them into successful execution?

☞Instead of an Almanac for subscribers, and a list of premiums for agents, we have reduced the price of The Cultivator, a measure which we doubt not will meet the approbation of our friends, as well as greatly promote the circulation of our monthly journal.

◆

Col. Hodge.—In a notice in our Sept. No., of the sale of the Buffalo Nursery, we stated that Col. Hodge had "retired to his fine farm at Peach Haven;" but Col. H. informs us that this is a mistake. He says—"I would have my friends understand that my residence remains unchanged, and where I have spent some forty years, (at Buffalo) and where I hope to spend the remainder of my days. At Peach Haven, I am planting out large orchards of the peach, pear, apple, &c., and in time I hope to make it a pleasant resort for myself and horticultural friends."

"J. R. P."—If your remarks "on the improvement of our markets for agricultural products," are to touch upon political questions, they will not answer for our pages. We desire to avoid all discussions of questions which are mingled with the partizan conflicts of the day. If free from this objection, we shall be glad to give them a place.

☞We learn that J. C. Tiffany, Esq., of Coxsackie, has sold his Ayrshire bull, "Dandy," to which was awarded the first prize in its class at the State Fair at Albany in 1850, to Charles Calvert, Esq., of Maryland.

The World's Fair—*Once More.*—A circular, which has been extensively copied in the newspapers, gives notice that an Exhibition of Industry of all Nations will be opened in the city of New York, on the 2d of May, 1853. A large palace is now in process of erection on Reservoir Square, for the purpose of the display. The association has established an agency in London, and invites correspondence from those interested. All communications, or inquiries addressed to "The Secretary of the Association for the Exhibition of the Industry of all Nations," at New-York, will receive attention. The prospects of this adventure, which were for a time rather gloomy, begin to brighten a little.

University of Albany.—The lectures before the law department of this Institution, are announced to commence on the third Tuesday of Dec. next. The Hon. Amasa J. Parker, Hon. Ira Harris and Prof. Amos Dean have this department in charge, and their success with the class of last winter, affords the highest promise for the future. We regret to say that no arrangements have been made for a course of lectures on Natural Science and Agricultural Chemistry, and that this most important department is apparently defunct. The loss of Prof. Norton, and the failure to obtain an appropriation from the Legislature at its last session, have placed a sad check on this enterprise. Still we are not without hope that from the ashes of this, a more enduring institution will sooner or later spring.

A Ladies' Riding Match.—A truly novel feature was introduced at the late fair of the Muskingum Co. (O.) Ag. Society. Three prizes of silver ware, valued at $50, $25, and $15, were offered to the ladies for the best exhibition of horsemanship. Nine ladies appeared on the arena, and of course all rode well, but the three most adroit, skillful and graceful equestrians received the prizes. The judges were necessarily gentlemen, for one lady would hardly award a premium for grace to another. Ohio must take the lead this year. We suppose some of these ladies who ride on horseback and breathe the fresh air, will write a book equal to Uncle Tom's Cabin, some day.

Covering wheat with Straw.—The Prairie Farmer details an experiment with covering wheat with straw, to prevent winter killing. The straw is spread about the thickness of flax when subject to rotting. This is stated to preserve the moisture of the soil, and protect the crop from the dry freezing weather towards the close of winter, so destructive to wheat. The straw quickly settles close to the ground, and the wheat springs up through it. A ridge of land on which the wheat had been uniformly killed, was treated in this way, and excellent crops of wheat the invariable result.

Reaping Machines.—The English agricultural journals abound in conflicting accounts respecting the merits of the American machines. The Gardener's and Farmer's Journal, speaking of the most important trials, says—"The first was at Tiptree, under the auspices of the jury of the Great Exhibition. There McCormick's machine carried the medal. A second trial followed at Middlesboro', and the jury unanimously reversed the decision and awarded it to Hussey. The Yorkshire Ag. Society tried it at Sheffield, before highly competent judges, and again reversed it, giving the prize to McCormick. The Driffield Farmer's Club had another trial. in a district, of all others, favorable to the reaping machine, and again confirmed the decision in favor of McCormick. The Highland Society threw out both, and decided in favor of one of Bell's; while the Cleveland Ag. Soc., after a very patient trial, gave again their verdict at Guisboro' in favor of Hussey's machine. Who can yet say which of them is the best?"

A New Lamp.—The New England Farmer for Oct., contains an article from Dr. Siedhof, a German Professor, announcing the invention of a lamp, for which a patent has just been issued. The inventor claims the following advantages. It has no machinery about it, any wick can be used,—it consumes exactly as much oil in a given time as a glass lamp,—it produces two and two-thirds as much light as the glass lamp. The light burns equally well till the oil is consumed—it burns the poorest oil as well as the best—it can be be made in any form, used with any shades and any number of burners—and it is very good looking. Should this lamp prove upon experiment to be all that is claimed for it, it will come into extensive use.

The Carbon Engine.—The Plough, Loom and Anvil for Oct., gives an account of the invention of new motive power by Prof. Salmon, who has after long experiment and discouraging hindrances perfected, as he thinks, the carbon engine. The power is obtained by the generation and expansion, by heat of carbonic acid gas. Common whiting, sulphuric acid, and water are used in generating this gas, and the boiler in which these components are held is similar in shape and size to a common bomb shell. A small furnace not larger than a hat, with a handful of ignited charcoal, furnishes the heat requisite for driving an engine of twenty-five horse power. This engine with a heat of 80° gives greater power than the steam engine with 452°, a heat which no engine can bear. The expense of driving a boat from Cincinnati to New-Orleans with steam is stated to be over $1,000; with a carbon engine, it would be only $5. Farther demonstrations soon.

Washing Clothes Wholesale.—The Ohio Cultivator informs us that at the great wash-houses in London, (connected with the public baths) there are at one establishment 84 apartments, each furnished with tubs, fitted with cocks for hot, cold, and waste water, baskets, and a steam-boiling apparatus. Mangles are at hand, and a drying machine supplied with hot air. A smart woman will do the washing, drying, and ironing for her family [of how many persons?] in two hours, at a cost of two pence. To stimulate her, she pays double after the second hour. Over 1,000 poor women wash here weekly. The receipts exceed the expenditures.

Silk and Beet Sugar.—According to the U. S. census, the quantity of silk produced in this country in 1850, was less than a fourth the amount of 1840—a surprising decrease, and only accounted for by the fact, long since established by many, that silk culture here is liable to too many disasters and drawbacks for carrying on profitably. Such pursuits will find their own level. We also observe that the quantity of beet sugar is gradually diminishing in France. Its unfitness for manufacture in this country was established many years ago, by the fact that beets must be raised at about six cents per bushel, to pay expenses, saying nothing about profits, while they would be worth far more than this for cattle food, at the present prices of other food, and of butter, cheese, and beef.

Tobacco.—We observe that the amount of tobacco raised in the United States has decreased about ten per cent in the last ten years. So says the census. However profitable it may be to individuals, we cannot but strongly doubt whether the large use of this vegetable contributes to national prosperity—more smoke than substance. We are much pleased to learn that the quantity of Indian corn has *increased* in the same period about 60 per cent, wool 48 per cent, and market garden products about 100 per cent. Tastes, we know, differ greatly; but for *us*, we decidedly prefer a good, well ripened, rose-cored, Imperial watermelon; "*to take*," as the doctors say,—to a concrete dose of tobacco juice.

Plaster on Wheat.—An experiment is stated in the Michigan Farmer, by Isaac Elliott, performed on "sandy and gravelly loam," by turning under a five years sod of clover chiefly, for wheat. The plowing was deep, and after thorough harrowing the wheat was sown and grew well in autumn. The spring was cold, and the young wheat turned yellow. Towards the close of four mo., (April) 80 lbs of plaster were sown upon it, "and in a few days it turned a very dark green color." It yielded 28 bushels per acre, except on small portions not plastered, where the crop was about 18 bushels per acre.

Guenon's Mode of Examining Cows.—C. Harvey, of Delaware Co., Pa., says that this mode of determining the milking properties at a glance, and even in a young heifer, is extensively adopted in that region, and is perfectly reliable. Several dairymen got hold of it about the same time, and ascertaining its correctness, were very careful to conceal it from each other. One farmer selected an excellent herd of cows by buying them of drovers when two-year heifers.

Certificate.

We, the undersigned, certify that we have sold to Mr. S. W. Jewett, of Vermont, America, of pure blood Merino Ewes, of our own raising, much more in number, and for a much greater value in money, than to all other American purchasers.

GUERIN,
CUGNOT,
VICTOR GILBERT.

Poissy, France, April 7, 1852.

Fruit and Shade Trees.

FOR sale at *Mount Ida Nursery*, *Troy*, *N. Y.*, a choice variety of Fruit Trees, comprising Apples, Pears, Peaches, Plums, and Cherries, of the most approved kinds.

Currants, Gooseberries, Raspberries, Grapevines and Strawberries, of the choicest varieties.

Also a good variety of shade trees, consisting of Scotch Elm, English Sycamore, Linden, Horse Chestnut, Mountain Ash, Larch, Oak, &c. Evergreen, Privet, and Buckthorn, for Hedges.

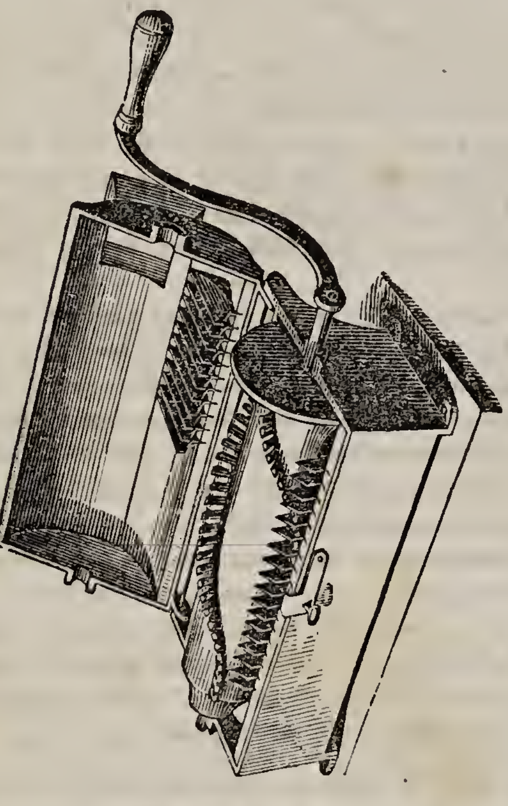
Rhubarb and Asparagus Plants, &c. Catalogues and other information can be had of the Nurseryman. JOSEPH CALDWELL.

Troy, Nov. 1, 1852—1t.

A Farmer and his Wife

WANTED, to take charge of a Dairy Farm in the town of Rye Apply to JOHN C. JAY, Rye, Westchester Co., N. Y.

Nov. 1, 1852—3t.*



Sausage Cutter.

THE general configuration of this machine will be understood from the engraving above. It will cut one hundred lbs. of meat per hour, and the knives are so arranged as to have a continuous action. The machine, as represented above, is open, but when shut, forms an inner cylinder through which runs the cylinder of pegs, operating against a spiral of knives. The meat is made finer or coarser, according to the rapidity with which it is fed. Price, wood frames, with one set of knives, $5—with two set of knives, $8. Iron frame $4. For sale by LONGETT & GRIFFING,

Nov. 1—3t. No. 25 Cliff Street, New-York.

Agricultural Implements.

STRAW AND STALK CUTTERS—of all patterns.
CORN MILLS—both of Iron and Burr Stone.
CORN AND COB CRUSHERS—of Beals', Nichols' and Sinclair's make.
ROAD SCRAPERS—of several patterns.
FANNING MILLS—of all the best makers.
SAUSAGE STUFFERS AND CUTTERS—of all patterns.
VEGETABLE OR ROOT CUTTERS—of approved kinds.
CORN SHELLERS—for hand and horse power.
VEGETABLE BOILERS—of Mott's and Bent's patterns.
GARDEN AND WHEEL BARROWS—of iron and wood.
HAY AND COTTON PRESSES—Bullock's patent.
BRICK MACHINES—of Hall's and other makers.
WAGONS AND CARTS.
PLOWS—of Prouty & Mears, Centre Draft, and Rich's Iron Beam.
PLOWS—Eagle, Massachusetts make, and Minor & Hortons.

For sale at the State Agricultural Warehouse, No. 25 Cliff-Street, New-York. Nov. 1—tf.

Superphospate of Lime.

THE genuine article, manufactured by C. Deburg, in bags of 150 pounds each. The subscribers have made a contract for a large quantity, and are now prepared to supply any demand. Farmers and gardeners would do well to call on us before purchasing elsewhere, as we are now able to sell for a less price than heretofore offered. Every bag is branded C. Deburg, Extra No. 1.

Nov. 1—tf. LONGETT & GRIFFING,
State Agricultural Warehouse, No. 25 Cliff-Street, New-York.

New-York Agricultural Warehouse and Seed Store.

WE have constantly on hand, the most extensive assortment of the best and latest improved Agricultural and Horticultural Implements, and Field and Garden Seeds, ever offered for sale in the United States, embracing every Implement, Machine, or Seed desirable for the Planter, Farmer, or Gardener. Also Guano, Bone Dust, Poudrette, Plaster of Paris, and Super Phosphate of Lime. Durham, and other improved breeds of Cattle and Sheep.

A. B. ALLEN & CO.
Nov. 1, 1852—tf. 189 and 191 Water St., New-York.

Important to Farmers.

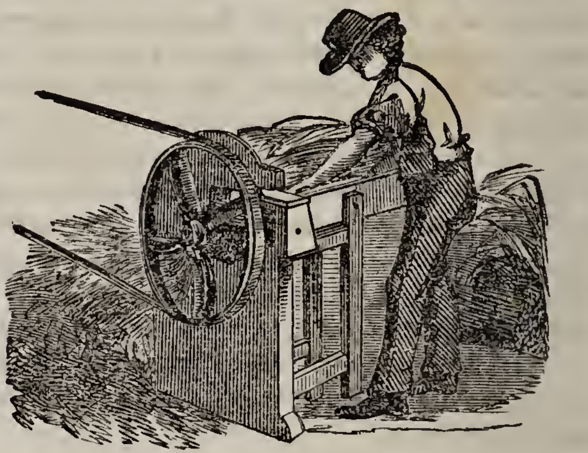
IT is generally conceded by all intelligent Farmers, that cutting the food for cattle will save about from 25 to 30 per cent. Bertholf's Oblique Rotary Corn Stalk, Hay and Straw Cutter, is conceded by all that have used them, to be far superior to any other, as it destroys all hard substances in the stalk, leaving it soft and easily eaten. It turns very easy, and is not liable to get out of order, and with care will last an age. It has been awarded four First Premiums and a Silver Medal, by the American Institute, For further particulars, address, (post-paid,) the Patentee, H. W. BERTHOLF, Sugar Loaf, Orange County, N. Y., or LONGETT & GRIFFING, 25 Cliff St., New-York, who are agents. Patent Rights for sale. Nov. 1—3t.

New-York State Agricultural Works.

WHEELER, MELICK & CO , will at the shortest notice, fill all orders for Machines made by them, among which are their Double and Single Horse Powers, and Overshot Threshers and Separators; Combined Threshers and Winnowers; Circular Saw Mills; Clover-Hullers; Horse Powers geered for churning; Feed Cutters for Horse Power, &c , &c.

The scarcity of fodder which prevails in many parts of the country, in consequence of the present dry season, induces them to call the especial attention of farmers to their

Wheeler's Pennsylvania Feed Cutter,



As being peculiarly adapted to this emergency.

This Machine is made expressly for Horse Power use and is very strong and substantial. In Pennsylvania it is used chiefly for cutting corn stalks, although it cuts straw and hay equally well, and will cut from half inch to two inches in length. It is simple and compact, having four plain, straight knives, which are attached in such a manner that they may be taken off and ground, and then replaced, without producing the least variation. All the wearing parts are made so that they can be adjusted by means of screws, with a common wrench, and any person can keep the Machine in the most perfect order. In cutting corn stalks they are crushed between strong iron feed rolls, and being cut short, the coarse stalks are split into small pieces, which reduces the whole to very fine feed. They are capable, with one horse, of cutting 150 bushels per hour. Price $28.

WHEELER, MELICK & CO.,
Albany, Nov. 1—1t. Corner of Liberty and Hamilton Sts.

THE OHIO FARMER,
AND MECHANIC'S ASSISTANT,

Edited and Published in Cleveland Ohio, by Thomas Brown.

A FAMILY Newspaper, devoted to Agriculture, Horticulture, Mechanic Arts, Literature Domestic Economy, Social Improvement, and General Intelligence.

The Wholesale and Retail Prices of all the leading articles bought and sold in the NEW-YORK, CLEVELAND, CINCINNATI and PITTSBURGH Markets, are also accurately reported each week.

The FARMER is one of the largest, and is acknowledged by all who are acquainted with it, to be one of the best Agricultural Newspapers in the United States.

Sample Copies will be sent to any part of the United States, if the request be made of the Publisher, by letter, post-paid.

TERMS.—Single Subscribers $2.00. Clubs of two or more, $1.50 each—*invariably in advance*.

A limited number of advertisements will be inserted in the Farmer at the rate of $1 00 per square, (ten lines or less,) for the first insertion, and fifty cents for each subsequent insertion.

THOS. BROWN, Publisher,
Merchant's' Exchange, Cleveland, Ohio.
Cleveland, Nov. 1, 1852—3t

Superphosphate of Lime.

THE GENUINE ARTICLE, manufactured by Professor Mapes, also C. Deburg's No. 1—with printed directions for their use, in bags of 150 pounds each. Farmers and Gardeners will do well to apply to us, as we keep none but the *genuine unadulterated* article.

A. B. ALLEN & CO., 189 and 191,
Water-st., New-York.

Oct. 1—tf.

Super Phosphate of Lime,

FOR farming purposes, put up in bags of 150 lbs. each. For sale by JOHN MAYHER & CO.

Sept. 1—tf. No. 197 Water Street, New-York.

United States Agricultural Warehouse and Seed Store,

No. 197 Water Street, New-York.

THE subscribers solicit the attention of the public to the large and varied assortment of Agricultural and Horticultural Implements, Field and Garden Seeds which they have constantly on hand, and offer for sale at the lowest prices and on the best terms.

Aug. 1—tf. JOHN MAYHER & CO.

Hay and Straw Cutters,

OF all styles and sizes, for cutting Hay, Straw, or Cornstalks; for sale at the United States Agricultural Warehouse and Seed Store, No. 197 Water Street, N. Y. JOHN MAYHER & CO.

Sept. 1—tf.

Seed Wheat.

GOLDEN Australian, Mediterranean, White Flint, Canada, Black Sea, Soul's, in bags or barrels. For sale at the United States Agricultural Warehouse and Seed Store, No. 197 Water Street, New-York. JOHN MAYHER & CO.

Sept. 1—tf.

EMERY & CO.'s

Improved Horse Power, Thrashers and Separators.

THE undersigned have been appointed sole agents for the sale of Emery's new patent Improved Horse Power, Thrashers and Separators in the city of New-York. The State Agricultural Warehouse is the only Depot where this superior power can be had. As many powers are represented as Emery's patent, to avoid impositions, be careful to observe that the name of Emery & Co, is cast in full on every link of chain and the wheel hub.

LONGETT & GRIFFING.
July 1—tf. 25 Cliff street, New-York.

Horse Powers, Threshers and Separators.

Endless Chain Powers

OF all kinds ever made, for one and two horses, also cast iron Sweep Powers, for one to four horses. Threshers and Separators to match the above. JOHN MAYHER & CO.,

United States Agricultural Warehouse and Seed Store,
Sept. 1—tf. No. 197 Water Street, New-York.

Trees, Plants and Shrubs

SHOULD be transplanted South in the fall. Orders supplied from the best nurseries, at their prices. A. B. ALLEN & CO.,

Oct. 1, 1852—tf. 189 and 191 Water st., New-York.

Fruit and Ornamental Trees.

THE subscribers would beg leave to give notice to dealers and others purchasing Pear Trees, that their stock is remarkably well grown this season, and will be very strong and fine for the fall sales, and is as extensive a collection of saleable trees as can be found at any other nursery in the county. The collection grown on quince stock is also very fine.

The stock of Apple Trees will also be very large this fall, in lots to suit purchasers.

Plums—a general assortment of most of the leading kinds.

Cherries, Apricots, Peaches, Grapevines, Gooseberries, Currants, with other small Fruits, at the lowest market prices.

Ornamental Trees, being also grown extensively, can be furnished by the hundred at very reasonable rates—European Linden, Mountain Ash, Scotch Elms, English Elms, Horse Chestnuts, with a good collection of Roses, &c. Catalogues will be forwarded to all applicants.

WILSON, THORBURN & TELLER,
Oct. 1—2t. Nurserymen, No. 492 Broadway, Albany.

ANDRE LEROY, Nurseryman at Angers, France,

HONORARY and Corresponding member of the principal Horticultural Societies of the United States, and of Europe, begs leave to inform his friends, and all the nurserymen of the Union in general, that he has made large preparations, and has now on hand a considerable stock of all the finest Evergreen Seedlings, Roses, Fruit and Ornamental Trees, &c., &c., most suitable for the American markets. The experience of several years of putting up large orders for the United States, enables him to flatter himself that he has now all the necessary knowledge to give full satisfaction, and to assure the delivery in good order, of all the trees, &c., ordered.

He also begs to inform all nurserymen who have not already received the Supplement for 1852, to his Catalouge of 1851, that it can be obtained free of any charge, at his agent's office, M. Ed. Bossange, 138 Pearl-Street, New-York, who will also attend to forward all orders sent to him, and to pass through the custom house, and to reship all goods ordered, without any delay, and with the greatest care.

Address M. ANDRE LEROY, Angers, France,
Care of M. Ed. Bossange, 138 Pearl-Street, N. Y. Oct. 1—3t.

Albany Drain Tile Works.

No 60 Lancaster Street—West of Medical College, Albany.

THE subscriber has now on hand, Draining Tile of the following descriptions. Prices reduced.

HORSE SHOE TILE.

5½ inch Rise, or	4½ inch Calibre,...........	$18 00 pr. 1000.
4½ " "	3½ "	15 00 "
3½ " "	2¾ "	12 00 "

SOLE TILE.

4½ inch Rise, or	3½ inch Calibre,...........	$18 00 pr. 1000.
3½ " "	2¾ "	12 00 "

These Tile are over one foot in length, and are so formed as to admit water at every joint, draining land from 12 to 20 feet each side of the drain—being the cheapest and most durable article used.

Tile sufficiently large for drains around dwellings, at $4 and $8 pr. 100 pieces. Orders from a distance will receive prompt attention.

Albany, April 1, 1852—tf. JOHN GOTT.

New and Important Insurance.

Northern N. York Live Stock Ins. Co., Plattsburgh, N. Y.

INCORPORATED by the Legislature of the State of New-York, July. 1851. Horses, Cattle, and all kinds of Live Stock insured against Death, by the combined risks of Fire, Water, Accidents, Diseases, &c CAPITAL, $50.000.

GEORGE MOORE, Plattsburgh, Sec'y.
I. C. Mix, Fort Ann, Gen. Agent.

October 13, 1851.

This company are now organized and ready to receive applications for insurance. It is confidently believed that the owners of valuable animals will avail themselves of the advantages offered by this mode of protection. If fire, life and marine insurances are proper and expedient, so is live stock insurance: the reasons for insurance are equally applicable to all.

For terms please apply to Company's Agents.

Plattsburgh, July 1—tf.

For Sale.

ONE of the most desirable farms in the Chenango Valley, 2 miles from the village of Oxford, containing 220 acres—river flat—grain land, pasture, woodland, and orcharding. A large and convenient dwelling house, two large barns, with sheds and out-houses—watered by the Chenango River—a creek on which there is a saw mill, and by never failing springs. On it are more than 700 rods of stone wall. Persons wishing to purchase are desired to look at the crops and stock on the farm. Enquire of JOHN TRACY, Oxford, N. Y. Oct. 1, 1852—3t.

FOR SALE,

50 EWES and a few Bucks from my flock, the wool of which has sold, for the last three years, for forty-seven cents a pound, and averaged from three and one half to three and three-fourth pounds per head.

For further particulars, address the subscriber at his residence, Canaan Centre, Columbia county, N. Y., or Blanchard and Burt of the Wool Depot, Kinderhook. DANIEL S. CURTIS.

Canaan Centre, Aug. 1, 1852—tf.

Valuable Farm for Sale.

THE subscriber offers for sale four hundred and fifty acres of land, being a part of his homestead, and comprising two hundred acres of as desirable land as any in Addison county—lying on the main road four miles north of Vergennes on the border of Lake Champlain, and one mile from the Railroad Station. It is under good cultivation, and furnished with commodious buildings. The remaining 250 acres is wood land; a portion of it covered with a heavy growth of hemlock and other valuable timber, and the remainder with the best quality of wood for fuel. The property will be sold together or in parcels. Postpaid inquiries promptly responded to.

ROW'D T. ROBINSON,
Aug. 1—tf. Ferrisburgh, Addison co., Vt.

A First Class Dairy Farm for Sale.

MY farm of 320 acres, four miles south of the village of Oxford, Chenango county, N. Y., and near the Chenango Canal. 250 acres are under high cultivation, durably fenced, and well and permanently watered. The remainder is well timbered. It has a large two story mansion, five large barns, and sheds and out houses, in good repair. The soil is deep and of superior quality. It is admirably adapted for a dairy, or for grazing and grain; has a fine orchard of choice grafted fruit; and for profit, health, and beauty of location, cannot be surpassed. It is fully supplied with farming tools, and about fifty head of cows and young stock, all or any of which may be had with the farm. The New-York and Erie Railroad furnishes ample facilities for forwarding produce to the New-York market at all seasons, and the route of the contemplated Albany and Binghampton railway, passes within a few miles of the farm. The farm can be conveniently divided. Price low—title perfect. Terms most easy.

G. VAN DER LYN.
May 1, 1852—tf. Oxford, N. Y.

THE CULTIVATOR

Is published on the first of each month, at Albany, N. Y., by

LUTHER TUCKER, PROPRIETOR.

$1 per Ann.—7 Copies for $5—15 for $10.

OUR ARRANGEMENTS FOR 1853.

HAVING, since the death of Mr. Downing, the lamented Editor of "THE HORTICULTURIST," disposed of that work, the Publisher of "THE CULTIVATOR" has determined to carry into effect a design he has for some years had in contemplation, of establishing a WEEKLY JOURNAL, in connection with "The Cultivator," to be devoted to the cause of Agriculture and the Rural Arts generally. In pursuance of this plan, he has issued a sample number of a weekly publication, the regular issue of which will be commenced with the new year, to be called the

The Country Gentleman,

A WEEKLY JOURNAL FOR THE FARM, THE GARDEN, AND THE FIRESIDE.

The scope of THE COUNTRY GENTLEMAN will embrace:

I. THE FARM—Including—1. The Principles of Cultivation, the Preparation of the Soil and the most approved methods of Culture of all the Crops grown in this country.—2. The Manufacture, Preservation, and Application of Manures—3. The Description and Illustrative Drawings of all Implements and Machines requisite for the Farmer's use.—4. The Breeding, Rearing and Management of all the Domestic Animals, with Engravings of the different breeds.

II. THE GARDEN AND THE ORCHARD.—1. Descriptions will be given of all the FRUITS, of the different varieties, suited to the various sections of the country, together with the best modes of Propagation and Cultivation.—2. Selects Lists and Descriptions of FLOWERS, SHRUBS and TREES, suitable for large and small places, with Directions for their Culture.—3. Special attention will be given to the products of the KITCHEN GARDEN, a department hitherto too much neglected, as there are many plants highly desirable for the table, which have not come into general culture.

III. THE FIRESIDE.—This department will be of a miscellaneous character, embracing every variety of instructive and entertaining subjects, such as Historical, Geographical and Biographical Notes, Literature, Natural Science, Tales, Poetry, &c., consisting of original articles and selections of a high order.

IV. RECORD OF THE TIMES.—Under this head will be given a concise and systematic abstract of the News of the Week, embracing briefly every thing of general interest to country residents.

V. PRODUCE MARKET.—Great efforts will be made to render this department full and complete, and particularly valuable to the Farmer and Produce Dealer. A careful synopsis of the prices of Produce, Wool, Live Stock, &c., at the leading markets, will be given, as well as the condition of crops, &c.

It will be the aim of the publisher to make the paper attractive and elegant in its typography, choice and select in its contents—to make it indispensable to the Farmer, and desirable to every one who has a rod of ground to cultivate, or a home to beautify—and by devoting its columns to IMPROVEMENT IN AGRICULTUE, TO ELEVATION IN CHARACTER, AND REFINEMENT IN TASTE, to render THE COUNTRY GENTLEMAN, the standard in its sphere.

TERMS.—It will be printed on good paper, in the best style, and be liberally illustrated by Portraits of Domestic Animals, Views of Buildings, Agricultural Implements, &c., &c. Each number will contain 12 handsome quarto pages, from which all advertisements will be excluded, none being inserted except on the cover, which will be devoted to the interests of our advertising friends.

The price of the paper will be $2.00 a year, in advance—if not paid in advance, $2.50.

LUTHER TUCKER.

THE CULTIVATOR FOR 1853.

THE PRICE REDUCED TO FIFTY CENTS A YEAR.

As the proprietor will next year issue "THE CULTIVATOR" in connection with the weekly Journal announced above, he will be enabled to reduce its price to FIFTY CENTS A YEAR, while he will have it in his power to give increased interest and value to its pages, from the fact that its contents will consist of the choicest articles which appear in the weekly paper during the month. There will be no change in its character. Its object—"TO IMPROVE THE SOIL AND THE MIND"—will be the same as heretofore. The only alteration will be in the price—a change which will procure for it, he has reason to believe, a greatly extended circulation, and consequent increase of usefulness. Certainly this will be the effect, if those who have heretofore so kindly extended to it their aid, shall act with their accustomed energy in procuring subscriptions for 1853.

In calling upon our friends to renew their efforts in behalf of the next year's Cultivator, we beg to assure them, that, while its price is so greatly reduced, we intend to make it equal in value to any volume that has preceded it; and we solicit for it, not only the good will of its friends, but their energetic efforts to greatly extend its circulation. The price hereafter, will be as follows:

Single Copy, Fifty Cents—Eight Copies $3—any larger number at the same rate. ☞ All subscriptions must commence with the Jan. No., and the payments must in all cases accompany the order for the paper.

Will our AGENTS, to whom we are already under so many obligations, take hold of the work in earnest? Many have already assured us, that with this reduction of price, they could more than double their subscriptions for next year, and we trust that this will prove true with all our Agents.

☞ Every subscriber to our current volume, as well as all POSTMASTERS, and all others interested in the progress of Agricultural Improvement, are most respectfully invited to act as agents for THE CULTIVATOR.

Albany, N. Y. Nov., 1852. LUTHER TUCKER.

THE CULTIVATOR.

TO IMPROVE THE SOIL AND THE MIND.

NEW SERIES. ALBANY, DECEMBER, 1852. VOL. IX.—NO. 12.

Our Arrangements for 1853.

These were in some degree explained in our last; yet a more full development of our plans and purposes may not be inappropriate at this time.

And in the first place, we desire that it should be distinctly understood, that THE CULTIVATOR is to be continued as heretofore, and that, notwithstanding the reduction of its price to FIFTY CENTS, there is to be no deterioration in the character of the work itself. On the contrary, we assure our readers that we shall spare no pains to render THE CULTIVATOR more valuable than ever.—We are enabled to reduce its price, in consequence of its connection with our proposed weekly journal, and to increase its value from the fact that its contents will be made up from the best articles which appear in the rural department of the weekly sheet during the month. In this way, we published for many years at Rochester, the "Monthly Genesee Farmer," in connection with the weekly Genesee Farmer, previous to our connection with the Cultivator in 1840, and the system worked admirably—so well indeed, that its entire success led to the adoption of our present arrangements. Let no one, therefore, fear that "The Cultivator" will lose any of its interest, on account of its reduction in price; but let all its friends renew their efforts to extend its circulation, with the full assurance that, while, from the amount of reading matter it will contain, it will be altogether the cheapest of our agricultural journals, it will lose nothing of the high character it has so long sustained.

In establishing THE COUNTRY GENTLEMAN, we are but fulfilling a design we have had for some time in contemplation. That the time has arrived for a weekly journal like the one we propose, we have abundant evidence in the increased attention now everywhere devoted to rural affairs—in the demand which has arisen for reliable and tested information on all subjects connected with rural improvement—in the formation and success of Agricultural and Horticultural Societies, and in the rapid increase of facts important to the cultivator of the soil, which all demand a more frequent medium of communication with the public, than is afforded by our monthly journals. Beside this, and growing naturally out of the increased interest in agricultural subjects, there has sprung up a taste for rural decoration; and we believe the time has come, when, to that basis of solid improvement which we have so long advocated, there should be raised a superstructure in which beauty should combine with utility. Hence, in order to keep pace with the times, we must enlarge our scope so as to embrace all the topics enumerated in the prospectus, published last month, and which is republished on the last page of this paper.

The COUNTRY GENTLEMAN—and we have deemed this title a most appropriate one for a paper devoted to the interests and improvement of the American farmer—will therefore embrace in its scope all those matters which particularly interest the cultivator of the farm, the garden, and the orchard, as well as those relating to rural improvement and decoration generally, while its Fireside Department will be a new and attractive feature of the paper, which will afford both instruction and amusement to those who feel less interest in the practical operations of the farm and garden.

The Country Gentleman will be beautifully printed, handsomely illustrated, and filled with choice matter, calculated to instruct, improve, and elevate the character and standing of our rural population; and we recommend it to all our farmers who wish a weekly journal devoted to the advancement of their interests and improvement.

Those who desire only a monthly journal, will find THE CULTIVATOR now, as it ever has been, a safe and invaluable aid in directing their labors to the most profitable results.

It may not be improper, in this place, to state that the publisher has no connection with any breeders of stock, or with any agricultural warehouse, or patent machines or manures—no business connection to sway him in favor of this or that establishment, nor any prejudices to induce him to swerve from what he believes will best promote the interests of his subscribers. While his columns are alike open to all, to advertise their wares, he will be careful to recommend nothing which he does not fully believe merits the commendation which may be given it.

Readers, our plans for the future, are before you. If they meet your approbation, we ask your hearty co-operation, to enable us to carry them into successful effect. We ask you to aid us by continuing your contributions to our pages—by making our journals known to your friends—by acting, so far as you can, as Agents to procure subscribers to THE COUNTRY GENTLEMAN and THE CULTIVATOR. The latter being now reduced to 37½ cents to clubs, we hope to receive much larger lists for it than heretofore, as no farmer, who has any correct estimate of the practical value of its contents, can refuse to become a subscriber, if properly solicited.

☞ Specimen Nos. of both our papers, with prospectuses, will be sent to all who desire to act as Agents.

Education of Animals.

Thomas Day, the celebrated author of "Sanford and Merton," having among other eccentricities, adopted the notion that kind and familiar treatment of animals was all that was necessary to make them perfect specimens of docility, attempted to bring up a favorite colt on this principle. It proved a most serious and fatal mistake, for by a single kick of the animal, he lost his life. Restraint is in the highest degree essential. But it should be the restraint of reason and of uniformity. No philosopher can understand sooner the relation of *cause and effect*, than a domestic animal, so far as regards its own pleasures and pains. We have seen horses, which were used for driving a ferry-boat, pass unled from the stable to the boat, step on board, walk to the machinery and "back" themselves downwards through a narrow door, on the wheel, ready for work, entirely unattended, while most other horses could scarcely be driven on board.—An invariable feeding of oats, immediately following the act, sufficiently accounted for this remarkable movement. The animal quickly understood the connection between his position on the machinery, and his breakfast. A uniform infliction of "pains and penalties," will in particular cases accomplish as much as an appeal to the appetite, if under certain conditions, which we shall soon explain. We have never failed, except in a single instance, to reduce the most terrific kickers among cows, to *permanent* quietness and submission, in less than three days, by always following with a *single stroke* of the whip, every attempted blow of the hoof. But it was quite essential that the conditions, just alluded to, should be strictly observed, namely: 1. That perfect calmness should be preserved, for how can one govern another, when he cannot govern himself. 2. That every warlike *attempt*, whether it result in upsetting the milk-pail, or only in an abortive stroke against the air, should be punished precisely alike, for the animal has nothing to do with *results;* it is the *bad disposition* we wish to subdue.—3. A *single blow* only should be given for each offence, for in this case, the *dread* is greater than the pain—but if repeated, the terror instantly ceases, and a feeling of fury and resentment usurps its place. It is surprising how quickly the connection between the kick and the *invariable stroke* is impressed upon the animal's perceptions, by this course. We know a person who tried this treatment on a cow so untractable as to be milked with difficulty even when tied with a strong rope, and after the third milking she was ever after as quiet as a kitten in a cradle. A single stroke on the thigh for each kick, and a single cut across the nose, for each attempt to run, was the whole remedy.

We have just stated that this remedy never failed except in a single instance. In this case the animal possessed an extraordinary degree of natural shrewdness, and perceived at once the firmness and self-possession about to be encountered, and consequently suspended her bad tricks until others resumed the charge of her.

Needless severity, may we not say cruelty, spoils the disposition of more animals than all other causes put together. In all the successful cases we have stated, a familiar, kind, and soothing manner was constantly practiced, and severity only on the actual commission of a bad deed. The most successful trainer of oxen we ever knew, pursued towards the young animals, an invariable course of kind treatment, always insisting however on having ultimately his own way. In the first place, having obtained several yoke of steers for the commencement of his operations, and enclosing them in a sufficient yard, his first object was to make them familiar with his presence. For this purpose he continued for some hours to pass constantly among them, touching with his hand as occasion offered, but never frightening. By degrees, they would allow him to handle them freely. The ox-bow was next applied to their necks, and by gently pressing or pulling, they would soon give up, and follow where he insisted they should go. In this way everything desired was accomplished—and not only so, but in the best manner possible, for it was a common remark that these oxen were more thoroughly trained than any others in the country. A slight motion of the whip, or a low word of command, was only required to induce instant obedience—no "terrors of the lash," no vociferous screams, so commonly considered necessary in driving oxen, were ever needed.

There can be no question that nearly or quite all unmanagable and fractious animals, are made so chiefly through bad treatment—the only way to cure them we have already pointed out. We shall mention a few instances of this bad treatment—because it is often as useful to show how a thing should *not* be done, as to give the best rules. Domestic animals and children are often mismanaged in precisely the same way. Thus, a child is sometimes severely punished for a misfortune, and slightly reproved for a crime; carelessness, resulting in the fracture of a costly looking-glass, is visited with a heavy penalty; but if, by mere *luck*, the glass is not broken, the thing is very quietly passed over, even though the intention may be far worse. In the same way we have seen the accidental upsetting of "a swimming pail of milk," followed with a torrent of blows upon the poor animal's back, while the most spiteful kick, "with malice prepense," but hitting nobody, escaped the vengeance of the law. Milkmaids and milkmen, sometimes endure for a while, and with a great deal of patience, the troublesome tricks of badly educated animals, without even an expression intelligible to them, disapproving of their misdeeds; but when patience departs, vengeance arrives, and a thorough storm pours down its terrors. This is the way to ruin any beast. We once knew a very *clever* farmer, (using the adjective in its American sense,) who committed the milking of the cows to his two boys, who, sometimes teasing the animals, found them rather intractable. To punish them for "running away," they were driven into the yard again, and there received a due infliction from whips, clubs, and stones. The animals, looking into *cause and effect*, discoved that if they kept their distance they escaped torture, and hence in a little while it became impossible to approach them, which the good natured farmer accounted for by expressing the opinion that "they really had the Old Harry in them?"

We have written the more freely on this subject, because it is obviously a matter of very great importance, so far as the comfort and satisfaction of farming are concerned, as well as the moral influences of shunning whatever chafes the temper, or strengthens vindictive passions. There are fifteen million cattle in our country, and it becomes an interesting question whether the children of farmers, who are to spend a large share of their lives among them, are taught to regard them all as like wild beasts, the objects of fear, dread, or vengeance; or to look upon "the sight of animals enjoying life," under humane treatment, as an important source of rural gratification, to say nothing of the feelings of humanity towards human beings, which must inevitably be cherished and increased by the cultivation of humanity towards the brute creation.

Theory and Practice of Farming.

Very much is written and said on the theory and practice of agriculture at the present day. When this comes from a reliable source it is often timely and judicious; but on the other hand too much comes from visionary theorists, who write to display the graces of style and establish a reputation. It may not be difficult to secure a literary reputation among the well-read residents of our large towns and cities, but farmers do not judge by the same standard.

A short time since I listened to an agricultural address, at a plowing match, on which occasion the orator went on to say how easy a matter it was to master this scientific farming. For instance, it was just as easy to raise nine hundred bushels of carrots on an acre, as one hundred; the only difference being in the use of special manures, and a little extra cultivation. Again, if the soil was thoroughly plowed and sub-soiled, no crop would ever suffer from drouth. Farther, he stated, that six weeks study in the winter, would give any farmer knowledge enough of chemistry to analyse his own soil. Then, in growing the peach, all that is necessary to have the trees live as long as they used to forty or fifty years ago, is that they should be pruned close to the ground, when first set out, and then shortened in once in two or three years. There was nothing said about the different diseases which affect the peach—the yellows, blight, and curled leaf. More peach trees have, probably, been destroyed by the yellows, than all other diseases, and so far as my knowledge extends, no certain remedy has been found for its fatal attacks. No cultivation will prevent it, nothing but the extermination, root and branch, of the diseased trees, will check its spread in the orchard. Careful cultivation, pruning in some way, will undoubtedly make the trees more healthy, and lengthen the period of their life.

As to learning enough of chemistry in six weeks to analyse a soil, I know it cannot be done, and have the best authority for saying so. It is only by practical chemists, who are deeply learned in the science, and have facilities for analysing soils, that anything can be successfully done.

Special manures, such as guano, poudrette, bone-dust, &c., are good in their place, and should be used by farmers more than they are. But after all, the principal resource of the farmer lies in his barn-yard, and whoever allows his stable manure to run to waste, calculating to depend on special manures, makes a great mistake. Their cost is so great that no farmer can depend on them for his principal manure, unless he lives near a large market city, where land is dear, and produce proportionably high.

The orator also stated that there was no necessity of having a grain crop lodge, if it was only properly cultivated. That is, if plenty of lime and silicates were added to the soil, instead of barn-yard manure, the grain would always stand upright. Now, to say the least, this is true only in a limited degree. Everybody knows that a tall, heavy crop of grain, is more liable to lodge than a short, light one. The reason for this may be partially the absence of silicates, but more particularly the law of gravitation. Spring grains, which grow rapidly, are more liable to lodge than winter crops, such as rye and wheat, which grow more slowly and derive more silica to support the stalk.

It has always been my purpose, in writing, to tell plain, practical truth, and not to indulge in any puffing or gas-blowing, which is a species of dishonesty. It has become quite fashionable of late for men to talk of scientific agriculture, as though it were the most simple, easy thing in the world. The agricultural literature of the day, has increased tenfold in the past few years, and this speaks well for the progress of farming in the future. But after all, it is the every-day working farmer, who sustains the business, and with their improvement, as a whole, will agriculture advance. Some "agricultural talkers" seem to think that it is only five or six years since farming has been practiced scientifically. Now, this a mistake. There were those, fifty years ago, who studied as severely, and labored as successfully, as any farmer of the present day. Their number was less it is true, but they were in advance of the age in which they lived. Not long since, an editorial appeared in the New-York Tribune, on New Farming. After recounting what science has done for manufactures and the mechanic arts, the editor says: "But farming lingers in the back ground. The plow that cuts the soil of an American prairie, though greatly improved, is substantially the same instrument as that sung by the poet of Syracuse or Mantua," &c.

The plow, without doubt, is one of the most ancient of agricultural implements, as well as the most useful. In the days of Pliny, the philosopher, it is said the plow was simply a crooked stick, pointed, and the team that drew it was "a woman and an ass" yoked together. The Tribune then goes on to compare agricultural improvements with recent inventions, such as the telegraph, spinning-jennies, &c., leaving farming, of course, a long way in the rear. If the Tribune thinks that the majority of farm labor is to be done by machinery, we think he is in error. We do not attempt to set bounds to what human invention may accomplish for the farmer, but whoever imagines that machines will supercede back-bone labor, is *romancing* on a subject which will not be likely to gain much from his efforts. As a case, illustrating this new farming, the editor mentions the improvements made on the farm of Mr. Meechi, of England. One of the principal features in his management, is the use of a large tank into which all refuse matter and liquids are collected. The contents of this are carried by large iron pipes to every part of his farm, and thrown by a steam engine to any desired place. Every machine that can save labor is employed, and special manures are used without stint.

This experiment proves what one scientific man with an immense fortune at his disposal can do. But does the Tribune suppose that this is to be the standard for all English or American farmers in future? It is very well for Mr. Meechi to say that, with all his outlay, his farm pays him fair interest in the increase of crops and improvement of the soil, but all farmers have not the means to carry on business on such a scale, the prudence to manage it, or such market as to justify a like expenditure. We doubt whether a half-dozen farmers in England will repeat the experiments Mr. Meechi has made. The impracticability of carrying theories into execution has blasted many a plausible scheme.

The Tribune speaks as if it supposed that the application of machinery to agriculture was a new thing. Implements and machines have been steadily improving for the last thirty years, and more has been done in the last ten years than in the previous half century. We do not, however, consider it of so much importance that steam engines be introduced, as that farmers themselves improve. We are now probably a quarter of a century in advance of England in the use of improved farm implements and labor-saving machines, while England may be as much in advance of us in the thorough culture of the soil in some of her best districts. Not one farmer in ten avails himself of all the improvements in his reach for the cultivation of his soil. And so it is with our mechanics. A majority of them are mere "hewers of wood and drawers of water," while a few keep up or are in advaece of the age, and give tone and character to their employment.

Harvesting machines, revolving horse rakes, and improved plows, are great aids in farm labor, and their use has brought about a marked change in the last ten years. Harvesters will be confined mostly to the grain-growing regions of the south and west, while in New-England the grain cradle will be chiefly used. The sickle is still used extensively in Great Britain, and we doubt whether a Yankee grain cradle was known in England until exhibited there at the World's Fair.

Improvement is the watch-word of the times, and if we do not answer readily to its call, we must be left behind. L. Durand. *Derby, Ct., Oct.* 14, 1852.

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Poverty and Procrastination.

Cold weather is coming in good earnest. Sheep huddle together in some corner; cattle seek protection from the wind by standing close to the side of the barn; poultry are standing on one leg under the shelter of some equally defenceless cart; pigs gather about the kitchen door in sullen silence. I am too poor to provide conveniences for my stock, exclaims the sluggish farmer, they must wait another year.

It is a chilling autumn night. The hollow wind sighs mournfully as it sweeps the bare branches of the trees, and pierces with a shrill whistle the crevices of the sluggard's house, making him draw nearer to the half smothered fire, which flickers on the hearth. I am too poor to repair my house and prepare dry wood, sighs the shivering man; I will try to do it another year.

The wood-shed has yielded up its last stick of decayed fuel, and the yard has been gleaned of its last basket of chips, belonging properly to the manure heap. The farmer has yoked his unwilling cattle, and is about to repair to his wood-lot for a load of dry limbs and fallen trees, but meets with an unexpected hindrance to his benevolent intentions. The sled which experienced much hard usage the preceding season, and has been watered by all the summer's rain and chilled by the autumn frosts snaps its tongue with the first pull of the cattle—"Hang my luck," ejaculates the ill-starred man. "Was ever one so unfortunate," echoes the wife as she thinks of the smouldering fire and the half-cooked dinner that is to be. The vexed sufferer solaces himself, however, with the idea that poverty is the basis of his misfortunes, and that when he shall have grown rich in spite of such ruinous losses, he shall put everything to rights.

Thanksgiving, with its good cheer, has passed, and the district school is to commence on Monday. The children have been living in the prospective for some days, and not a few plans for fun, or perhaps improvement, have been matured. The farmer's son, a thoughtful, bright-eyed boy, who has driven the cows to pasture the live-long summer, presided over the luncheon and the jug of drink, picked up the potatoes, and been the man of all work, asks of his father a favor, which he thinks is richly deserved—two new books for the winter's school. He tells his father how the other boys of his class are to have them, how he shall fall behind them wtithout this assistance—how he will study, and work harder next summer if he can have them, and that they will cost only one dollar. But his imploring looks and earnest language avail nothing with the father. He says not an encouraging word, but simply mutters—"I did'nt have books—I am too poor to buy them; you must wait another year."

An agent for an Agricultural Journal, seeing the forlorn appearance of the premises, and thinking ignorance must have caused such bad management, presents his paper, asking for his name and four shillings. "O! it's no use," exclaims the farmer—"I don't believe in book farming; I am too poor, you must wait another year."

So year after year the poverty-stricken and procrastinating farmer drags on, lamenting the fortune which his own negligence renders inevitable, making his family equally miserable with himself, by denying them the means of improvement—too ignorant and too poor to grow wiser or richer. Almost as easily may the leopard change its spots or the ethiopian his skin, as a man be induced to change his course of life, and we have reason to believe that this unfortunate man will to his dying day, consider himself the victim of untoward circumstances, the son of misfortune, and the sport of destiny, instead of seeking in his own improvidence the cause of his bad luck.

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Good and Bad Farms.—A ten acre field, costing fifty dollars per acre, and ditched, manured and improved, at fifty dollars more, so as to give double crops, is much more valuable and profitable than twenty acres unimproved, costing the same money.

Female Education and Influence.

The language of this extract, from Thos. B. Arden's Address before the Putnam Co. Ag. Society, is not more beautiful than its sentiment is true. The character of those who are to be the farmers of the next generation, the principles which are to guide them, the homes which they are to have, will, in no inconsiderable degree, depend upon the mothers, who give the first impress to the susceptible nature of the child. We are glad to notice this happy allusion, and wish that this truth were more frequently presented on similar occasions. The mother is the very life of home, and as are the homes of a people so are their lives. If purity reign here—if high thoughts and right motives be taught here, the great question of life is settled, before the child leaves the paternal roof:

Home associations and home influence are to be implanted and brought to maturity, by her who reigns in every domestic circle, and who alone possesses the key to our moral nature. The mother, who, from earliest infancy, has watched the slow development of latent energies, alone can ward off the worldly influence of school training, and fit her son to go forth into the world, prepared to meet, combat, and conquer the evils and temptations that skirt the paths of undeviating truth and moral principle. Man has not the same opportunity, nor has he the peculiar capacity for studying the character of children. When men are prepared for any particular profession, their education, beyond a certain point, is carried forward with a view to the particular requirements of that profession. Should not the mother whose field of action is, beyond a doubt, a separate and peculiar sphere, be invested with similar advantages?—And how is this end to be brought about—how is this high moral character and harmonizing influence to be implanted? I answer, educate your daughters; throw within the domestic circle those excellencies of character which you take particular pains to admire when abroad. Let benevolence, simplicity of character, truthfulness and charity towards your neighbor, be a constant theme of admiration and remark, and not only in the family circle, but in those gatherings of relatives and friends so constantly recurring in every community. Cultivate a love for music, and that grandeur and loveliness of nature which your own hills and valleys constantly present in the never ending panorama of the seasons. Point to the industry of the ant, the prudence of the bee, the contentment of the poor who trust in God. Early nurse a taste for flowers, for through every season they stalk in beauty through your woods and meadows, inviting you to a communion that brings with it no bitter thoughts. Every child will remember the little spot of ground set apart within the cottage door-yard, to beguile its hours of play, and years cannot erase from his memory the halo thus cast around his home. When I invite you to the field of flowers, understand me not to mean the favorites of other climes, (though I would not exclude them,) but the gems of nature which are to be found in your own forests and lowlands—something that is within the reach of all, and equalling, if not surpassing, in beauty, the natives of warmer climes. The rhododendron, the kalmia or laurel, the azalia, the orchis, the alder leaved clethera, the lobelia cardinalis or cardinal flower, together with its varieties, and the gentiana crinata or fringed gentian, are among those most conspicuous; the modest hepatica or liverwort, anemone or wind-flower, and dog-tooth violet, are the first to greet us in the spring, like a messenger of peace, bearing assurance of Winter's relenting grasp. For such I would invite you to labor; for the trouble of removing the soil will teach the useful lesson, that the food must be adapted to the plant; at the same time, it inspires that contentment of feeling which our happiness places beyond price. She who, by such an education, is made a truly valuable wife, best fitted to discharge the duties of a mother's high office, is also prepared to meet those strokes of adversity which are the common lot, and still with cheerfulness walk on, guided by that principle "which maketh all things right."

Analysis of the Cucumber—*Cucumis sativus.*

Two varieties only were examined, the *Early Long Prickly* and the *White Spine.* They were in a fit condition for table use. Length of the fruit of the Early Long Prickly $6\frac{1}{2}$ inches, diameter $1\frac{3}{4}$ inches. Length of the fruit of the White Spine 5 inches, diameter $1\frac{1}{2}$ inches

Percentage of Water, Dry Matter and Ash.

	Long Prickly fruit.	White Spine fruit.
Percentage of water, ...	96 364	96.605
" dry matter,......	3.636	3.395
" ash, ...	.362	.382
" ash in dry matter,	9.955	11.252

In the fruit of this plant we see a remarkable instance of the extent to which water may exist in a plant. But about $3\frac{1}{2}$ lbs. of dry matter is contained in 100 lbs. of the fresh fruit. One ton would contain but about 70 lbs. of dry matter. Hence one ton of fresh cucumber fruit contains less dry matter than $1\frac{1}{2}$ bushels of wheat. One ton of fruit, of the Long Prickly, contains, of inorganic matter, 7.24 lbs. One ton of the White Spine, 7.44.—27,624 lbs. of the fresh fruit of the Long Prickly variety, and 26,178 lbs. of the fruit of the White Spine variety, give each 100 lbs. of inorganic matter. These 100 lbs. of inorganic matter are severally constituted as follows:

	100 lbs. ash of Long Prickley.	100 lbs. ash of White Spine.
Carbonic acid,..........	13.25	13.26
Silicic acid, ...	0.70	0.80
Phosphoric acid,..........	18.90	17.26
Phosphate of iron,..	3.10	2.74
Lime, ...	4.30	4.40
Magnesia,..............................	0.20	0.34
Potash,......	23.20	23.30
Soda,...................................	33.75	33.86
Chlorine, ...	1.10	1.46
Sulphuric acid,...............	0.90	1.40
Organic matter, ...	trace.	trace.
	99.40	98.42

The inorganic matter, as is seen, is composed mostly of phosphoric acid, potash and soda. This would indicate that ashes, bones, and common salt, would be an excellent inorganic manure for them.

Proximate Organic Analysis.

	100 lbs. Long Prickly.		100 lbs. White Spine.	
	Fresh fruit.	Dry fruit.	Fresh fruit.	Dry fruit.
Albumen,...............	.356	7.778	.347	7.699
Casein, ...	.040	0.872	.062	1.357
Dextrine,...............	.354	7.736	.264	5.894
Sugar and extract, ...	2.826	67.756	3.036	0.065
Starch, ...	.002	0.044	.003	66.624
Chlorophyl,.....	.006	0.132	.005	0.108
Fat, wax and resin, ...	.031	0.682	.029	0.629
Fiber,..................	.961	21.000	.826	17.924
Dry matter,............	4.576	100.000	4.572	100.000
Water..................	95.354		99.921	

In the proximate organic analyses I obtained less water than I did when the percentage of water, dry matter and ash were determined. This resulted from the fact that portions used for the proximate analyses lost some of their water by evaporation before the analyses were commenced.

Besides the above bodies, the cucumber contains a small quantity of malic acid, and a still smaller quantity of citric. One ton of the fresh fruit of the Long Prickly variety contains of sugar 56.52 lbs., of albumen and casein 7.8 lbs., of dextrine and starch 7.12 lbs. One ton of the fresh fruit of the White Spine contains of albumen and casein 8.18 lbs., of dextrine and starch 5.34 lbs., of sugar 60.72 lbs. By far the greater part of the dry matter of the cucumber is sugar.

Ultimate Organic Analysis.

	Long Prickly.	White Spine.
Nitrogen,	1.236	1.301
Oxygen,	41.806	41.832
Carbon,	40.984	40.467
Hydrogen,	6.879	6.723
Inorganic matter,	9.955	11.252

The indigestibility of the cucumber is almost proverbial. In fact it has scarcely a parallel example in all the cultivated edible plants. In studying its composition, we can scarcely refrain from making the inquiry: What does this much esteemed fruit contain, to unfit it so much for easy digestion?

One would naturally suppose, from the tendency it has to pass through the digestive organs without being materially acted upon by the digestive process, like most other food, that it is constituted of bodies, which are either deleterious to the system, or are not essential to its composition. If we refer to the analysis, however, we find that the bodies which compose it, are found in nutritious healthy food, and are all quite harmless; in fact, the most of them go to build up and support the several tissues of the human body, and are necessary to their healthy nutrition and growth. We, hence, must conclude that the indigestibility of this fruit, cannot depend upon the kind of matter of which it is composed.

Suppose now we examine the relative proportions in which the several bodies unite to form this fruit, to see if there can be anything in this direction which will throw light upon the matter. We find, in the foregoing analysis, all the bodies in very small proportion, with the single exception of water. The per centage of this in the fresh fruit, is equal to about 96 per cent. May we not infer that this very large per centage of water has something to do in retarding digestion? It is well known that all of those fruits which contain a very large proportion of water, such as the watermelon, green apple, cherry, currants, &c., are very apt, when taken in quantities, and without admixture with other food, to produce like unpleasant symptoms, and pass through the stomach and intestines without being scarcely acted upon at all by the powerful solvents of these organs. Water, however, does not seem to be the only body in food, which when in great excess, may appear to retard digestion. Other substances, as casein, albumen, fat, sugar, &c., when in large proportion, appear to produce like results. For instance, cheese—which is composed principally of casein, but contains also in small quantity, quite all the constituents of the animal body—when eaten alone, and in quantities, produces symptoms somewhat similar to those produced by the cucumber, and is voided in a similar undigested state. The same may be said of food composed principally of either albumen, fat, sugar, &c.

May we then not infer from the above, and numerous other examples, which readily will suggest themselves to every one who observes, that food suited to easy digestion must contain, not only the ingredients of which the tissues are composed, but these ingredients must bear some simple relative proportion to each other.—That is, they should be in such proportion as is best suited to furnish nourishment to the system with the least possible loss of undigested material. J. H. Salisbury, M. D. *Albany, Dec.* 16, 1852.

Agriculture of Sullivan County.

Eds. Cultivator—Knowing that you have a large number of subscribers in our county, and believing that we are scarcely known as agriculturists, I have thought that some account of its resources and capability of production would be interesting to a portion of your readers.

In order to a proper understanding of these, a short description of the geography of the county will be necessary. Previous to the digging of the Erie canal, there was considerable emigration to the county, notwithstanding the almost insurmountable barrier to entrance, which the Shawangunk Mountains—the alps of New-York—stretching from the north to the south the whole length of the eastern boundary, formed, and also a belt of barren land from four to six miles in width, running parallel with the mountains and valley. Most of the land on the east side of the mountains has been in a good state of cultivation for many years, as well as the valley on the west side. Farming in these sections is on a good basis, and has been the chief business for a long time.—The Delaware and Hudson canal extends through this valley. A large portion of the northern and central parts of the county lies in ridges and valleys, and was formerly covered with dense forests of beech, maple, hemlock, bass-wood and birch.

Previous to the construction of the Erie canal, considerable of these lands were sold for farming purposes, and in many instances at high prices, but after that channel was opened, emigration was diverted to the west and continued in that direction for many years. Farming was much neglected, and most farmers made lumbering a business, much to the injury of their farms.—The roads were extremely bad; the principal ones leading into the county from the east, crossing at right angles all the high mountain ridges. The Delaware and Hudson canal, which was finished, if I mistake not, in 1825, gave a new impetus to agriculture, making a better home market for the produce. It also had the effect to make goods cheaper than when dealers were obliged to cart them some forty miles from Newburgh.

About the year 1812, a few capitalists from Green co., came and erected large tanneries, which furnished a nearer and better home market for produce. As a consequence, a portion of our farmers gave more attention to their business; while a large number commenced peeling bark and lumbering.

The business of lumbering now began in good earnest. Most of it from this section found its market in the city of New-York, through the canal. The lumbering and manufactories helped to build the flourishing villages along the canal, and these villages not having a farming country around them were principally manufacturing ones, which tended to benefit the home market. Tanning proved profitable, and many enterprising capitalists were led to engage in it, which had a tendency to increase the lumbering, as the lumber was lighter and easier to handle after being stripped of the bark. This increase of business necessarily brought in a great number of mechanics and workingmen, farmers included.—The tanning business was at first confined to the northern and central sections of the county, but gradually was extended over the entire county. Since the building of the Erie railroad, which extends along the southwestern part of the county, that section is now being settled rapidly, and the land cleared up; but the county is yet so new that little is known of its capacity. The tanners use the bark, and the lumbermen prepare the timber and send it down the Delaware river in rafts to Philadelphia, or on the Erie railroad to New-York. Of late years the timber is becoming scarce, and farmers have turned their attention successfully to agriculture. The land proves equal, if not superior, to any in the State for dairying purposes, as well as for raising stock. It is peculiarly adapted to the raising of sheep. The butter produced here ranks equal to any in market. The county is not a wheat growing district, but nearly all other grains are grown in perfection. The potato flourishes remarkably well; whether owing to the peculiar composition of the soil, I will not now pretend to say.

I will, however, call attention to one fact in connection with the crop. I find by referring to the late census, that the potato crop has increased in this county, from 1845 to 1850, 43,194 bushels, while the same crop in the State has decreased 7,255,056 bushels. Also, that in 1845, we had 68,525 acres of cleared land, and in 1850, 94,425 acres; an increase in five years of 25,900 acres. Also the following increase of grain and other products; rye, 27,976 bush.; corn, 32,167 bush.; buckwheat, 26,487 bush.; butter, 60,533 lbs.; cheese, 50,670 lbs. The population in 1845, was 18,727, in 1850, 25,090; an increase of 6,363. In 1850, the county produced 10,225 pounds of honey and bees-wax. From these items may be gathered something of the capacity of the county, for productions, and its present rate of increase.

The facilities of getting to market, are recently much improved by the construction of several plank roads, which bring us within a day's journey of the city of New-York. The Shawangunk mountains are now crossed with ease, and the county, with all its natural disadvantages, ranks high in internal improvements. Those who formerly crossed the high hills, would be surprised to find us now accessible by roads running along our valleys and streams.

Most kinds of fruit do well in the northern and central portions of the county. Apples aud plums would equal any of those grown in the river counties, if equal care was bestowed on their cultivation.

There are thriving villages springing up all over the county, with beautiful churches, where the different evangelical denominations weekly meet to give praise and thanksgiving to the most High. There are two institutions oi learning of high order; one at Monticello, the other at Liberty. The district school houses are mostly new, of large dimensions, beautiful in construction, and convenient. The schools are generally of a superior character. The climate is remarkably healthy; there is no county where the per centage of deaths is lower than in this. Land is at present from 25 to 30 per cent cheaper than in most counties, possessing the same fertility, and equal facilities for marketing produce. Good improved farms may be bought at pricec ranging from $20 to $40 per acre, according to improvement and location.

The county offers great inducements to agriculturists at the present time. Our home market is better than that of New-York, and our premium crops prove that the soil is not inferior to that of other sections of the State. There is now going on an agricultural and geological survey of the county, which will probably be completed during the coming winter. This will show our agricultural and other resources, and give analyses of the soil, so that farmers may know with more certainty, what manures to apply to their soil, and how to save labor in the use of those already abundant on their farms. There is to be a history written of the county, and a map published locating all the roads, villages, lakes, ponds, rivers, and each man's farm. Yours truly, LOTAN SMITH. *Liberty, Sullivan co., Nov.* 1852.

Condition and Resources of Canada West.

The Cultivator, since its first establishment, has received a liberal patronage from all the British American Colonies, and the Upper Canadians, especially, have been liberal supporters of the agricultural press. But comparatively little is known of the agriculture of our British neighbors, as but few American travellers of distinction sojourn north of the lakes; and therefore, beyond a mere commercial intercourse, little is known of the political and social institutions, and the literature, tastes, and habits of some two millions of people, who inhabit our northern frontier. We have taken some pains to become acquainted with the actual condition of the agriculture of Canada West, hoping that some new and important features might be brought under notice, which would contribute to the further development and improvement of American agriculture, and at the same time be a source of edification and profit to the readers of our paper. The facts thus elicited, will be laid before the public, in a series of short articles, which will embrace all the practical details that would be thought interesting and valuable to those interested in the acquisition of sound agricultural knowledge.

The differences that exist between American and Canadian agriculture, is greater than possibly could have been supposed. Contrary to expectation, much of the prevailing practice, if incorporated upon American agriculture, would be an improvement, and on the other hand our Canadian neigbhors could find much in our agriculture that would impart an additional lustre to theirs. What these differences are, in the main, will be critically examined, so that the most striking improvements practiced by our neighbors may be engrafted upon the agriculture of this country, so far as applicable to our peculiar requirements. The early inhabitants of Canada were those who attached themselves to the British standard during the struggle for American Independence. One of the earliest governors of Upper Canada, in the early part of the present century, issued a proclamation, and caused it to be largely circulated among the northern, eastern and middle States, in which the climate and soil for agriculture was highly extolled, at the same time offering free grants of land to any of the American citizens who would prefer being under monarchial institutions to republican. A very large emigration of Quakers, Dunkards, and other religious denominations, who would take no part in the struggle for American liberty, availed themselves of this offer, and these, with the other class mentioned, formed the pioneer settlers of Canada West. Pretty soon after the war of 1812, an emigration from the British Islands commenced, and gradually extended till the year 1830, from which time up to the present, the average increase from that source, has been some 30,000 annually, consisting of English, Irish and Scotch, in nearly equal numbers. This immense influx of foreign population has stamped upon Canadian agriculture not a few indelible features, which, to an inquiring mind, must form a theme of no small interest, as it is presumable that a system of agriculture successfully practiced north of the lakes would be equally applicable to the soil, climate and circumstances of the people living nearly in the same latitude south of those lakes. The differences, then, that seem to exist between the western Canadians and the American farmers, may be clearly traced to this one fact, that the English and Scotch farmers, in establishing their new homes in the colony, brought with them their early prejudices and habits, and so soon as they became in the ascendency, all other systems merged into the British practice; while on the other hand, the peculiar features of our agriculture have been proof against much foreign innovation, and the Europeans of all ranks have readily adopted it, as fast as they established themselves in their new homes.

The first thing that would attract the attention of the American farmer, in travelling through the Canadas, is the strange, cumbrous, and seemingly unique appearance of the plows, which consist of as great a variety of patterns, as do the plows of our country. These plows embrace all of the most improved English and Scotch patterns, with an almost endless number of mongrels, built to gratify the tastes and whims of the mixed race of people who inhabit that country. No patent laws exclude them from general use, and nevertheless almost every county, and sometimes even township, has a plow in general use, embodying distinct features from those in adjoining counties and townships. A Canadian plow is fully twice as long as an American, and they are constructed to turn a furrow from nine to twelve inches in width, and from six to nine inches in depth. They are supposed to be much easier in the draft than the American plow, and owing to the great length of the handles, are very easy to hold. At many of the State and county plowing matches of this State, plows of a very similar pattern, have entered the ranks for competition with American plows, and in some cases have won the palm and in others have failed. Those who have witnessed these performances can fully appreciate the difference that exist between the plows of the two countries, and can determine for themselves in which consists the superiority.

Plowing matches, conducted upon the most enlightened scale, are held every spring under the patronage of the county and township agricultural societies, at which premiums ranging from $10 to $30 for the best specimen of work, are awarded, including in the list some hundred or more dollars, divided into classes under junior and senior departments. These plowing matches, embracing as they do some ten to fifteen in a populous county, and occurring as they have done for the past ten to twenty years, have become instrumental in perfecting a uniform practice in plowing, that forms one of the most marked features of the agriculture under notice. The peculiarities of the plowing of our Canadian neighbors, and the manner of conducting the plowing matches, will form an article for our next issue. E.

Daniel Webster a Farmer.

We have been so long accustomed to think of Mr. Webster as an orator and a statesman, that it may surprise some to know that he honored and cultivated a taste for rural pursuits. The following letter shows that in the responsibilities and trials of his later years, he did not forget his farm, or cease to regard farming as an important pursuit, tinctured a little with poet-inspiring pleasures.

Washington, March 18, 1852.

" John Taylor—I am glad to hear from you again, and to learn that you are all well, and that your teams and tools are ready for spring's work, whenever the weather will allow you to begin. I sometimes read books on farming, and I remember that a very sensible old author advises farmers 'to plow naked and to sow naked.' By this he means that there is no use in beginning spring's work till the weather is warm, that a farmer may throw aside his winter clothes and roll up his sleeves. Yet he says we ought to begin as early in the year as possible. He wrote some very pretty verses on this subject, which, as far as I remember, run thus:

" While yet the spring is young, while earth unbinds
The frozen bosom to the western winds;
While mountain snows dissolve against the sun,
And streams yet new from precipices run—
E'en in this early dawning of the year,
Produce the plow and yoke the sturdy steer;
And goad him till he smoke beneath his foil,
And the bright share is buried in the soil.'

" John Taylor, when you read these lines, do you not see the snow melting, and the little streams beginning to run down the southern slopes of your Punchbrook pasture, and the new grass starting and growing in the trickling water, all green, bright, and beautiful; and do you not see your Durham oxen smoking from heat and perspiration as they draw along your great breaking up plow, cutting and turning over the tough sward in your meadow in the great field? The name of this sensible author is Virgil; and he gives farmers much other advice, some of which you have been following all this winter, without even knowing that he had given it:—

" But when cold weather, heavy snows and rain,
The laboring farmer in his house restrain,
Let him forecast his work with timely care,
Which else is huddled when the skies are fair;
Then let him mark the sheep, and whet the shining share,
Or hollow trees for boats, or number o'er
His sacks, or measure his increasing store;
Or sharpen stakes, and mend each rake and fork,
So to be ready, in good time, to work—
Visit his crowded barns at early morn,
Look to his granary, and shell his corn;
Give a good breakfast to his numerous kine,
His shivering poultry and his fattening swine."

" And Mr. Virgil says some other things, which you understand up at Franklin, as well as ever he did:

" In chilling winter, swains enjoy their store,
Forget their hardships, and recruit for more;
The farmer to full feasts invites his friends,
And what he got with pains, with pleasure spends;
Draws chairs around the fire, and tells once more,
Stories which often have been told before;
Spreads a clean table, with things good to eat,
And adds some moistening to his fruit and meat;
They praise his hospitality, and feel
They shall sleep better after such a meal."

" John Taylor, by the time you have got through this you will have read enough. The sum of all is, to be ready for your spring's work as soon as the weather becomes warm enough, and then put your hand to the plow and not look back. Daniel Webster."

Horticultural Department.

Fruit Catalogue of the American Pom. Society.

Transactions of the Second Session of the American Pomological Society, held in the city of Philadelphia, on the 13th and 14th of September, 1852.

Through the politeness and prompt attention of Dr. Brinckle, we have been favored with an early copy of this valuable collection of Pomological information, comprised in a large pamphlet of 168 pages. As we have already given a condensed account of the proceedings of this session, we can only furnish at the present time, a brief notice of the contents, reserving for a future occasion the opportunity of presenting to our readers some of the most interesting facts which the report furnishes.

The excellent opening address of Dr. Brinckle, the late President, contains many valuable suggestions, some of the most important of which were subsequently acted upon by the Society. About twenty-five pages are then given of the discussions on fruits, which possess great interest and value. We regret that portions of this part of the report are deficient, and often inaccurate. For example, the Washington pear, which was adopted as worthy of general cultivation, is not even mentioned; the same omission exist relative to the Fontenay Jalousie, recommended as worthy of trial; and the Doyenne Boussock, is printed *Doyenne Goubault*, making the latter, which is but little known and cultivated in this country, a sort for general cultivation. Again, one of the members is made to speak (p. 34) of the "circulation" of a fruit, conveying no meaning, and again (p. 42) commending a pear as being "*almost* worthy" of the cultivation it receives. These and similar inaccuracies diminish the value of the report. Most of the volume is occupied with the reports of the State Fruit Committees from Maine, Vermont, New-York, New-Jersey, Pennsylvania, Delaware, District of Columbia, Virginia, South Carolina, Kentucky, Michigan and Illinois, some of which, and more especially that from Maine, possess high merit. Col. Wilder's admirable eulogy, and the testimonials of Horticultural Societies, on the character of A. J. Downing, close the volume.

On the whole, this report furnishes convincing evidence of the utility, and the excellent influence exerted by the American Pomological Society, in collecting, collating, and placing before the public, a vast fund of pomological knowledge, which otherwise must have remained hidden or known to but few. We give below the last revised list of varieties recommended by this society.

Fruits worthy of general cultivation.

Apples.

American Sum'r Pearmain,
Baldwin,
Bullock's Pippin,
Danvers Winter Sweet
Early Harvest,
Early Strawberry,
Fall Pippin,
Fameuse,
Summer Rose,
Swaar,
Vandervere,
White Seek-no-Further,
Wine Apple, or Hays,
Winesap,
Gravenstein,
Hubbardston Nonsuch,
Large Yellow Bough,
Lady Apple,
Porter,
Red Astrachan,
Rhode Island Greening,
Roxbury Russett,
And for particular localities.
Canada Red,
Esopus Spitzenburg,
Newtown Pippin,
Northern Spy,
Yellow Belle Fleur.

Pears.

Ananas d'Ete,
Andrews,
Belle Lucrative or Fondante d'Automne,
Beurre d'Anjou,
Beurre d'Aremberg,
Beurre Bosc,
Bloodgood,
Buffum,
Dearborn's Seedling,
Doyenne d'Ete,
Flemish Beauty,
Fulton,
Golden Beurre of Bilboa,
Louise Bonne de Jersey,
Madeleine,
Paradise d'Automne,
Rostiezer,
Seckel,
Tyson,
Urbaniste,
Uvedale's St. Germain, for baking,
Vicar of Winkfield,
William's Bon Cretien or Bartlett,
Winter Nelis,
And for particular localities.
Grey Doyenne,
White Doyenne.

Apricots.

Breda,
Large Early,
Moorpark.

Nectarines.

Downton,
Early Violet,
Elruge.

Peaches.

Bergen's Yellow,
Cooledge's Favorite,
Crawford's Late,
Early York, *serrated*,
Early York, large,
George the IVth,
Grosse Mignonne,
Morris White,
Old Mixon Free,
And for particular localities.
Heath Cling

Plums.

Bleecker Gage,
Coe's Golden Drop,
Frost Gage,
Green Gage,
Jefferson,
Lawrence's Favorite,
Purple Gage,
Purple Favorite,
Washington,
And for particular localities.
Imperial Gage.

Cherries

Belle Magnifique,
Black Eagle,
Black Tartarian,
Downer's Late,
Downton,
Elton,
Early Richmond, for cook'g,
Graffion or Bigarreau,
Knight's Early Black,
May Duke.

Grapes.

Under Glass,
Black Hamburg,
Black Prince,
Black Frontignan,
Chasselas de Fontainebleau,
Grizzly Frontignan,
White Frontignan,
White Muscat of Alex'dria
Open Culture.
Catawba,
Isabella.

Raspberries.

Fastolf,
Franconia,
Red Antwerp,
Yellow Antwerp.

Strawberries.

Boston Pine,
Hovey's Seedling,
Jenney's Seedling,
Large Early Scarlet

Currants.

Black Naples,
May's Victoria,
Red Dutch,
White Dutch,
White Grape.

Gooseberries.

Crown Bob,
Early Sulphur,
Green Gage,
Green Walnut,
Red Champagne,
Houghton's Seedling,
Iron-monger,
Laurel,
Warrington,
Woodward's White Smith.

New varieties which promise well.

Apples.

Autumn Bough,
Hawley,
Melon,
Mother,
Northern Spy,
Smoke House.

Pears.

Brandywine,
Brande's St. Germain,
Beurre Giffard,
Chancellor,
Doyenne Boussock,
Doyenne Goubault,
Duchesse d'Orleans,
Duchesse de Berri,
Diller,
Jalouise de Fontenay Vendee,
Kirtland,
Limon,
Manning's Elizabeth,
Nouveau Poiteau,
Onondaga,
Ott,
Pratt,
Paradise d'Automne,
St. Michel Archange,
Stevens' Genesee.
Striped Madeleine,
Van Assene.

Plums.

McLaughlin,
Prince's Yellow Gage,
Rivers' Favorite,
St. Martin's Quetche.

Cherries.

Bigarreau Monstreuse de Bavay,
Early Purple Guigne,
Reine Hortense.

Grapes—Diana.
Raspberries—Knevetts's Giant.
Strawberries—Burr's New Pine.

Productiveness of Strawberries.

We sometimes startle those not well versed in strawberry culture, by assuring them that (excepting picking) a bushel of strawberries may be more cheaply raised than a bushel of potatoes—on a large scale, with a good soil and with horse cultivation. Without arguing the point here, we wish merely to quote a statement from Hovey's Magazine, of the amount raised on a small piece of ground by William Gore, of Frankfort, Me. The piece of ground was eleven feet by forty-three, and the product was *three and a quarter bushels,* being 300 bushels, or 9600 quarts per acre. The bed was six years old, and the variety Hovey's Seedling, a sort not usually regarded as so productive as some others. One hundred and fifty bushels per acre is not an unusual crop, with fair cultivation; and we can perceive no difficulty in doubling the amount by the best treatment. Twenty-five cents per bushel before picking, would more than repay all expenses, with economical management.

Fruit at State Fairs.

The Genesee Farmer proposes that collections be exhibited without the names of the owners, but only with the numbers of entry attached, till the judges have made their awards, in order to secure impartiality. We have just been reading the report in the Granite Farmer, of the Fair of the Connecticut River Valley Society, where this practice was adopted. We are informed that the result was quite unsatisfactory—the committees often wishing information, and exhibitors usually remaining in charge of their articles, statements were made by them to the committees, while the public learned nothing as to the origin of the collections. We know there is much cause for dissatisfaction, but we believe it is as much owing to the general practice of commending large showy specimens, to the exclusion of those less attractive in appearance but of vastly superior flavor, which practice our most eminent pomologists are not entirely free from. There are very few committee-men from whom we should expect a prize on a collection of Pomme Gris, Swaar, Dyer, or Ross Nonpareil apples, or of Seckel, Rostiezer or Winter Nelis pears, while a neighbor should display side by side, large and brilliant Alexander or Beauty of Kent apples, or Belle of Brussels, or Colmar of Aremberg pears.

Answers to Inquiries.

Transplanting Trees.—A correspondent expresses the opinion that care should always be taken that trees in transplanting occupy the same position with regard to the points of the compass, as they did before. We cannot speak confidently of the importance of observing this particular in Southern Virginia, where our correspondent resides; but in New-York, where the summers are cooler and much shorter, we have not found it essential, having transplanted thousands of trees promiscuously, in some instances without losing one.

Pruning Fruit Trees.—Thos. G. Turner, near Richmond, Va., wishes to know the best time and mode of pruning fruit trees, and especially the apple and peach, at the north. We take it for granted that he means standards for orchards. Apples should be so pruned as to form a neat rounded or slightly flattened head to the tree, and should be equally thinned throughout, just so much and no more, as to prevent a stunted and imperfect growth of the branches by crowding. The work may be done at any time except in spring, when the sap flows freely. The wounds, if large, should be coated with an alcoholic solution of shellac. The peach should be pruned a few weeks before growth commences, and especial pains should be taken to *prune down or back,* that is, constantly with a view to prevent the elongation of the branches, and to keep the head in a small, compact form, never more than eight or ten feet in diameter. For further particulars, reference may be made to the published works on fruit culture.

Raising Hickory Trees.—A Berks Co. (Pa.) subscriber inquires when the nuts of the hickory should be planted—having after two years trial never succeeded.

The nuts, without being permitted to become dry, should be mixed with moist peat, covered with leaves, and in this condition be exposed to the winter frosts. If carefully cracked in the spring, and planted early, they will grow.

To Prevent Injury to Trees by Rabbits.—In the Oct. No., I see that J. T. Wilson informs the Michigan Farmer of the failure of several "infallible" preventives for the gnawing of rabbits. I think I can inform him, and others who wish to try it, of one that will not fail. It is this: Take half a newspaper, and wrap it full width two or three times round the tree, and fasten it with twine. It will last six or eight months, and I have never known a tree protected that way, to be attacked by either mice or rabbits. For mice only, the paper need not be more than six or eight inches wide. L. *Farmington, Ct., Nov.* 1, 1852.

Wintering Cabbage Plants.—I have a large number of cabbage plants, that have now got nearly large enough to prick into a bed for winter protection. I wish to know, through your next issue of the Cultivator, the easiest and surest way of keeping them until spring, without being hurt by the winter.

I wish some one of your subscribers, or yourself, to give, through the same channel, a description of the different varieties of potatoes. The reason is, because there are, in this vicinity, several varieties that go by the same name. K. Norris. *Burlingham, Sullivan Co., N. Y.*

In answer to the inquiry, in relation to the keeping of cabbage plants through the winter, we quote the following from Buist's Kitchen Gardener:

> The plants must be protected in a cold frame, covered with boards or shutters, removable at pleasure. It may be made by any person, merely by taking a few boards about one foot wide; stretch them along in any sheltered situation, to the extent that will hold the required plants of cabbage and lettuces (say twenty feet long and six feet wide, which will hold four thousand plants, which, after allowing a considerable portion for failing, will be enough for a large family.) Sink in the ground short posts of cedar or locust at back or front, and nail firmly thereto sound boards of oak or pine, the board at the back one foot high, the one at the front six inches; this, when covered, will allow the rain to run off. Throw up the earth close round the outside of the frame, to keep the water from entering under the boards or among the plants. If they are kept wet during winter they will die off, or what gardeners call "damp off." In fact, the dryer they are kept the more safe they will be. Give air in all clear weather during the winter. In severe frost they should remain covered all day, but expose them fully in mild weather. Take care that mice

do not prey upon them. If they do, take as much arsenic as will lie on a ten cent piece, mix it with a tablespoonful of Indian meal, and lay it on a piece of tile or board in the frame, where it will be dry, which will soon destroy them.

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Items in Horticulture.

There are certain isolated subjects, about which we often have verbal or written inquiries, and it has occurred to us that we might do some of our readers a service by occasionally giving a little condensed information under these various heads.

FLOWERS.

Moss Roses.—These require a richer soil than other roses, and a greater depth of earth, and they should, if practicable, be placed somewhat in the shade. A full hot sun is not favorable. Mulching is fine for them.

Succession of Flowers.—Flower beds are often a mass of brilliancy during some portion of the season, and all the rest as dreary as a desert. This can be only prevented by alternate planting of different bloomers, one succeeding the other. They need not be promiscuously mixed, but may occupy respective belts. Squills, hyacinths, tulips, gladioli, tiger flowers, lilies, and other bulbs, commencing with early spring and extending into mid-summer, may be followed by such annuals as Drummond's Phlox, Gillia tricolor, Portulaccas, &c. and the perennial phloxes, verbenas, and other perennials.

Hybrid Perpetual Roses.—These never bloom abundantly. Their great merit consists in their hardiness, in which they excel the Bourbons, and in the beauty and splendor of single flowers. The Bourbons and Noisettes are generally much more profuse in blooming, but need winter protection. The Hybrid Chinas, (perfectly hardy,) although displaying their beauties for a short period only, exceed during that period all other roses. If the Hybrid Perpetuals are divested of their flower buds during the early part of the season, they will make a more vigorous growth, and exhibit their blooms more freely later in summer and in autumn.

FRUITS.

Grapes for Grape Houses.—The most reliable and best sorts, are Black Hamburgh, which stands first, Chasselas of Fontainbleau, Muscat of Alexandria, and the White and Grizzly Frontignans.

Borer in Apple Trees.—These cannot be got rid of short of actual attack and extermination by war weapons. When they have not gone in far, they may be punched to death in their holes, but a surer way usually is cutting with the point of a knife. To prevent any more from entering, an offensive mixture, made by thinning soft soap with tobacco water, must be applied as paint to the lower part near the close of spring, about which time the perfect insect deposits its eggs.

Manuring Trees.—It is a very common but mistaken and useless practice, to apply all the manure close about the foot of the tree. The roots have shot off a long way from this narrow circle, and very few get any of the rich feeding intended for them. Others, with more judgment, but still erring, regard the circle of the roots as large as the circle of the branches, and apply accordingly. The circle should be still larger; for as a general rule, the roots extend as far as the distance from the bottom of the trunk, to the extremities of the tallest or longest branches; hence, in orchards, long before the boughs approach each other above, the roots below have formed one continuous net work through the whole surface of the field.

VEGETABLES.

Cauliflowers.—We have found the Welcheren cauliflowers uniformly the best and most certain in heading. Plants sown late in spring, even if destitute of any heads in autumn, head very finely during winter if removed to a cellar before freezing.

Striped Bugs.—This insect, which is properly a *beetle* and not a *bug*, is notoriously destructive to cucumbers, melons, &c. There are five or six remedies, some of which we have tried, and others not. The old fashioned way was to pass around two or three times a day, and pinch them to death. This is entirely effectual, but troublesome. A later mode is to cover the plants with cheap gauze stretched on wire frames. This is sure. A third is to place four bricks on edge about the plants, and cover with a pane of glass. This, if well done, cannot fail to exclude them. A fourth mode substitutes a wooden box, open above and beneath, for the bricks. A fifth is to *fence out* the insects by a wall a few inches in height, without any covering. This is done either by bricks on edge, or by open board boxes, the latter being best, as bricks are hardly wide enough. We have not tried this, but have heard it recommended as sufficient—it may be so where the insects are not abundant. A sixth is sprinkling with powdered air-slacked lime, or with powdered gypsum, which in some cases has been effectual.

The Home of Taste.

Give him a home—a home of taste.—ELLIOTT.

My Margaret, our home shall be a home of taste,
A sunny spot to nestle in amid the "streeted waste;"
Though round our door no cool green grass, no cheerful garden grows,
The window-sill shall blossom with geraniums and the rose.

Our parlor wall all up and down, for moral and delight,
Will hang with pleasant pictures—of landscapes green and bright,
Of portraits of the wise and good, the deathless sons of man,
And, to teach us love for all that live, the good Samaritan.

Of Burns, too, and his Highland maid, much loved, lamented Mary,
And by its side that AGED PAIR whose love no time could vary;
For love upwelling, pure and deep, from youth to sober age,
Shall be a light and blessedness through all our pilgrimage.

A goodly book-case we will store with learning's precious gold,
A hallowed temple to enshrine the mighty deeds of old;
With a plaster cast of Milton decked, and one of Shakspeare too,
And when my work is done, my love, I'll sit and read to you.

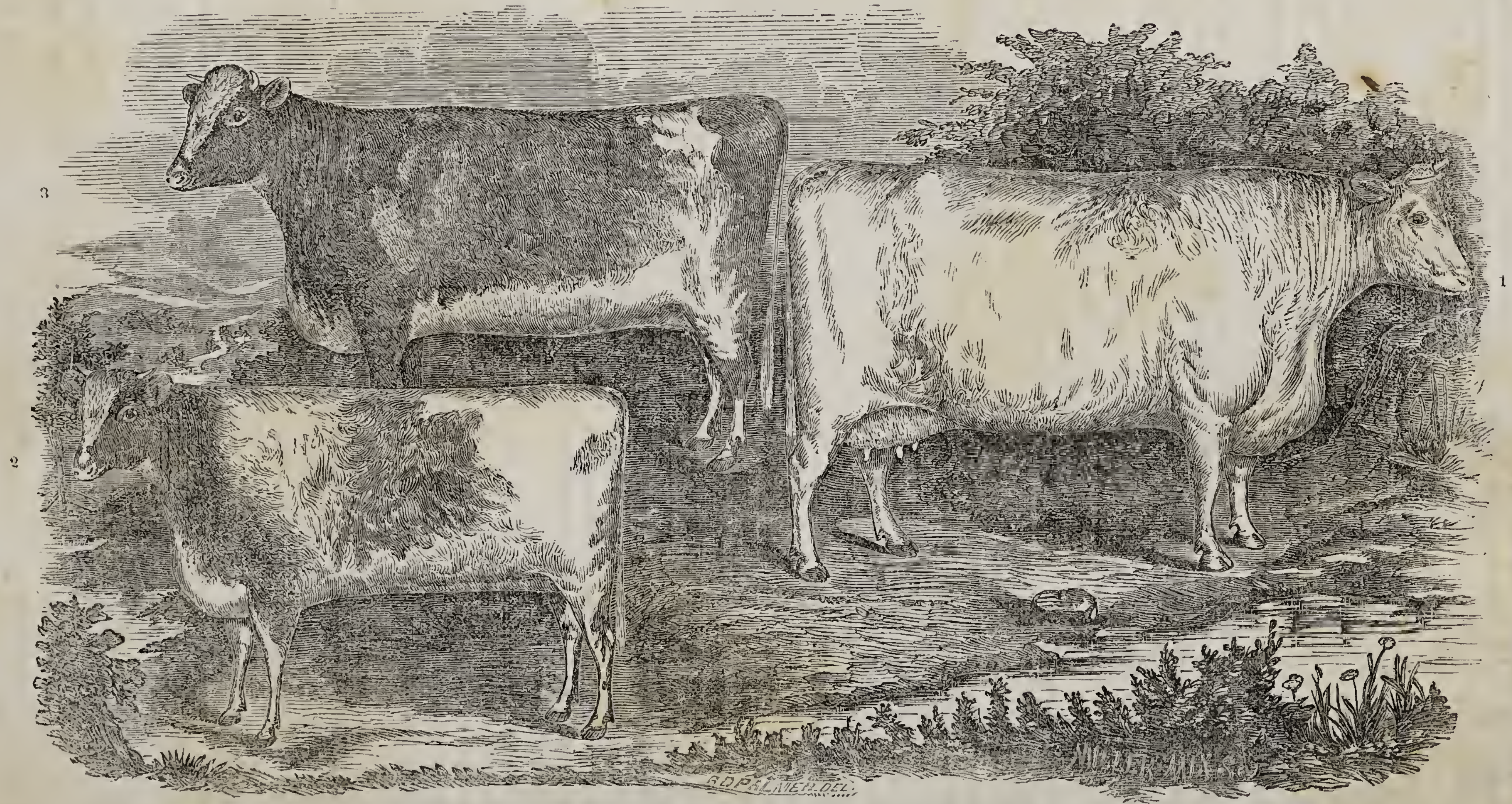
Some thrilling tale of olden time—love true in evil day—
Some lofty song of holiest bard, some gentle minstrel's lay,
Or wondrous revelation of science deep and high,
Or christian theme, that we may learn in peace to live and die.

And we'll not forget your music, love, the songs so sad and sweet,
You sang to me with tearful eye in your father's calm retreat;
That simple music of the heart, we'll sing it o'er and o'er again,
And link our days together still with its enchanting chain.

Will not our life be happy, love? Oh! yes, for we will seek,
The spirit of the Spotless One—the beautiful, the meek;
All pure desires and high resolves, all lofty thoughts and true,
And that which duty bids be done, our ready hands shall do.

Will not our life be happy, love? Oh! yes, for we will bow
Together at the throne of Him "from whom all blessings flow,"
And deep in his eternity—beyond the change of time—
And deep within our inmost soul, possess a peace sublime.

[*Household Words.*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G.D.PALMER.DEL.

Mr. Chapman's Prize Heifers—1. Dutchess—2. Hilpa IV—3. Ruby II.

Mr. Chapman's Prize Short-horn Heifers.

These fine heifers, in connection with three of Mr. S. P. Chapman's cows, Ruby, Charlotte and Daisy III, were awarded the first prize *collectively* at the show of the New-York State Ag. Society, held at Rochester in 1851, as "the three best heifers under three years old, and the three best cows over three years old, owned by one person." These portraits were taken soon after that exhibition, and Mr. C. assures us, that the past year has much improved their appearance.

At the late State Fair, held at Utica, Duchess won the second prize for Short-horn cows, being herself but three years old, and competing with aged cows. Ruby II, won the first prize for two years old Short-horn heifers, and Hilpa IV, the first prize for Short-horn yearlings.

At the show of the Madison Co. Ag. Society, held in September last, Duchess won the second prize for cows, [Mr. Chapman's Ruby winning the first,]—Ruby II, the first for two years old heifers, and Hilpa IV, the first for yearlings. Below we give their pedigrees as sent us by Mr. Chapman.

DUCHESS.—White, bred by S. P. Chapman—calved 25th June, 1849—got by the imported bull Duke of Wellington, 55, [3654,] bred by the late Thos. Bates, Kirkleavington, Yorkshire, England. Dam [Matilda,] by White Jacket, [5647]—grand dam [Hart,] imported, &c.—*See Am. Herd Book, page* 201.

RUBY II.—Roan, bred by S. P. Chapman—calved 27th May, 1850—got by Buena Vista. Dam [Ruby,] by Symmetry, 166—grand dam [Willey III,] by Mars—gr. g. d. [Young Willey,] by York—gr. gr. g. d. [Old Willey,] imported.—*See Am. Herd Book, page* 238.

Ruby won the first prize at the New-York State Ag. Society, at Albany, in 1850, in class of "milch cows." She gave, during that season, in eighty days, over four thousand pounds of milk, *her feed grass only*. The milk was of good quality, 19⅓ lbs. yielding one of butter.

HILPA IV.—Roan, bred by Geo. Vail, Esq , Troy, N. Y —calved 9th April, 1851—got by the imported Bates bull Duke of Wellington, 55, [3654.] Dam the imported Bates cow [Hilpa,] by the Duchess bull Cleveland Lad [3407]—g. d. [Hawkey,] by Red Rose Bull, [2493]—gr. g. d. [Hart,] by Rex [1375.]

ANSWERS TO INQUIRIES.

Osage Orange Hedges.—Please inform me if the Osage Orange will thrive throughout this region, as well as it will 250 miles south of this—or whether it has been fully tested in this latitude. C. E. R. *Scipio, N. Y.*

If we mistake not, our correspondent will find the Osage Orange growing on the premises of our friend, David Thomas, in his neighborhood, in such luxuriance as to convince him of its fitness for hedges in this latitude. Here it is more or less injured by our severe winters; but still, even here, we think it would make a permanent hedge—certainly one through which no animal would attempt a second time to pass.

Chicken Hatcher.—In your September No. 1847, you advertise the American Chicken Hatching Machine. Now that five years have passed, will you please inform me whether it has proved equal to the recommendation, or whether it has proved of little utility. L. S. P. *Houston, Texas.*

That the machine referred to, as well as several others which have been at different times brought to public notice, could be made to hatch eggs, there can be no doubt; but we have yet to learn of the first instance where they have been profitably employed for this purpose.

Corn after Turneps.—I have an acre of land that that has been in turneps for five years. I wish to plant the land to Indian corn, but am told that it will not do well after turneps. Will you or some of your readers, who have experience in the matter, please inform me if such is the case. P. B. *Otego, N. Y.*

Will some of our readers answer the above.

Gilbert's Thrasher and Cleaner.—Thomas G. Turner, near Richmond, Va., who inquires the price of "Gilbert's Excelsoir Wrought Iron Cylindrical Thrasher and Cleaner," would do well to address the manufacturer, as we cannot furnish the desired information.

Superphosphate of Lime.—In answer to Enquirer, relative to the benefit derived by the use of superphosphate of lime, we would state that we have sold upwards of one hundred tons since May, (manufactured by C. B. Deburg) to the farmers of Westchester, Long Island, and New Jersey, where it has been used on root crops, buckwheat, and gardening. We have received proofs by letter, also verbally, from nearly all to whom we sold, expressing their entire satisfaction as to the results; also consider it superior to Peruvian guano. We have several times had the superphosphate of lime made by Deburg analysed, and find it consists of the following ingredients:—guano, phosphate of lime, sulphuric acid, and sulphate of ammonia. As there are many substances sold for the superphosphate of lime under improved names, we should advise all who wish to purchase this article in the spring, to request analyses of the vender, and to buy, subject to such analyses. Longett & Griffing. *New-York.*

Capacity of Bulls.—Mr. J. M. Harlan, of East Fallowfield, Chester Co., Pa., informs us, in answer to an inquiry heretofore published, that he has a native bull, now three years old, which weighs 1,348 lbs., and which has served, up to the present time, at least 100 booked cows, that have been considered sure for calf. When between one and two years of age, he served fifty cows, the remainder since.

Which is the Best Grass for Meadows.

Mr. Editor—Which, of all the grasses, is best for meadows? Is a mixture better than one kind? The custom here is to seed down with a mixture of clover, herdsgrass or timothy and red-top.

The first season, the clover predominates; the second, the herdsgrass; but afterwards the red-top.

As the former dies out, the ground is left partially seeded. It is a well settled opinion, that red-top is more valuable for hay than herdsgrass; and herdsgrass more valuable than clover.

It is my experience, that herdsgrass and red-top will produce more hay, even the first season, than if mixed with clover, and that red-top is preferable to either. That red-top will produce more feed after mowing, and is far preferable for pastures. A horse of ordinary size, has been known to eat about six tons of herdsgrass (without grain) in a year; though performing very little labor. Orchard grass deserves notice. S. Tillotson. *Canton, Conn., Dec.* 1852.

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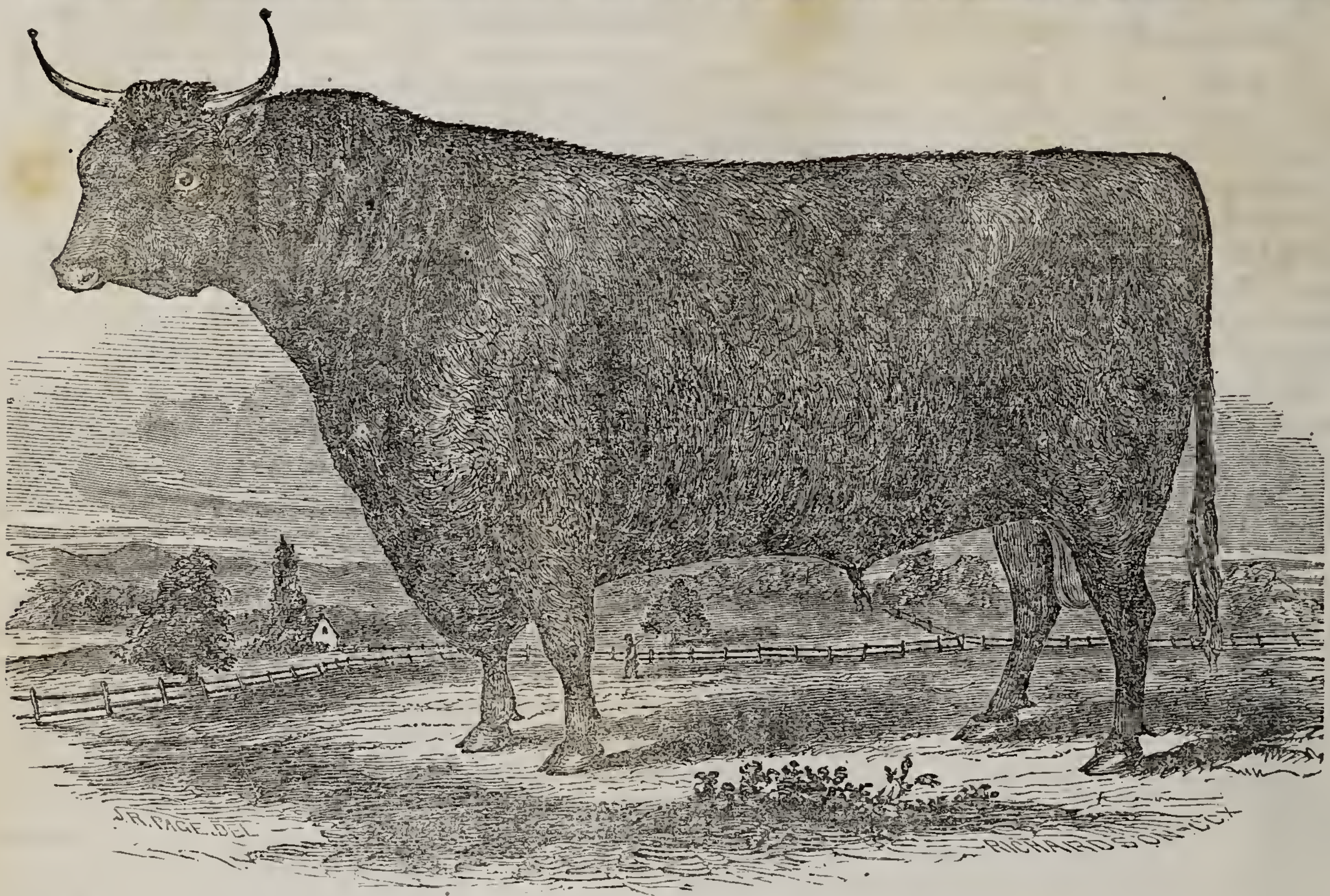
Punctuality in engagements is as necessary to an agriculturist as it is to a merchant.



Mr. Colby's Devon Bull Champion.

We republish the above portrait, given in our October No., in order to correct a gross blunder in the pedigree which we then attached to it. Mr. Colby sent us two portraits of his stock, but afterwards concluded to have but one inserted. By one of those mistakes which frequently occur, and which are generally laid to the charge of "the printers," we attached the wrong pedigree to the portrait. The true history of "Champion" is as follows:

This certifies that "Champion," the full blood Devon bull owned by L. H. Colby, that took the first premium at Utica in September last, was raised by us, and was four years old last March. Champion was sired by our full blood bull "Bloomfield," and out of "Beauty," now owned by Mr. Colby. Bloomfield took the 1st premium at the State Fair at Albany in 1850; and Beauty has taken the 1st premium at every fair where she has been exhibited, viz: at the American Institute in 1849, and two other fairs. Bloomfield was sired by Mr. Patterson's bull "Eclipse," and out of one of his full blooded cows. Beauty was sired by "Exchange," and out of a daughter of old "Fancy," which was sired by our celebrated bull "Holkham." S. & L. Hurlbut. *Winchester Centre, Conn., Nov.* 13, 1852.

Fertility of the Ohio Bottoms.

A transient correspondent of the N. Y. Evening Post boldly attacks an article in the October Cultivator, on the fertility of certain Ohio soils, and to which he applies the phrase "*empirical quackery*,"—in opposition, we presume, to what he would term "*scientific science*." If we could only read the French and Latin with which he has sprinkled his article, we should doubtless find them more correct than his English—at least we charitably hope so.

The whole object of the article in our October number, was to show the importance of rendering the food of plants *accessible*, by means of well pulverised and mixed soils. This view the correspondent of the Post regards as "calculated to confuse," &c., and "to discourage the progress of the farmer," &c. He thinks the atmosphere will more easily penetrate a coarse than a finely pulverized soil—forgetting that it would only enter *between* the coarse masses, and not into their substance. The air, it is true, would pass with great facility into a pile of cobblestones and unburnt bricks; but this heap, even if containing a good quantity of manure in lumps, would make rather a harsh bed for the delicate fibrils of a plant, and afford slim nourishment to vegetation. Why do chemists pulverize finely all substances on which they wish acids to act freely? That it may enter and operate on every part at once. A similar pulverization equally facilitates the chemical changes which are constantly going on in soils supporting vegetation.

He thinks the fertility of the Ohio bottoms is owing wholly to manure dropped by the cattle and hogs which feed in the fields after the corn has been husked. This is undoubtedly of great value—and much more so on such a soil as will render this manure most easily accessible to the crop. It is the combination of both that makes the best soil. He thinks the eighty bushels per acre should be set down forty or fifty, because he has travelled through Ohio, and did not learn that more than this is raised there. According fully to him strict accuracy in his observations, he will permit us to relate an anecdote. A rogue was arrested for stealing a sheep, which he stoutly denied. "Here are two witnesses," said the judge, "who saw you steal it." "An' very well," said he, "I can bring twenty witnesses that didn't see me steal it."

Reaping Machines in England.

Mr. Editor—In the last number of your *Cultivator*, you copy from an English paper a notice of what are called "the most important trials," made in England, "of the American (Reaping) Machines," which concludes with the question—"who can yet say which of them is best?" leaving it to be inferred that upon that question, no general opinion has been formed.

If, however, you will look over the reports of the several trials, which have taken place during the past year, you cannot, I think, fail to come to the conclusion, that the results have sustained to the fullest extent, the award of the Council Medal, for my machine, by the jury and council of chairman of the Great Exhibition. And for the purpose of satisfying your readers upon this point, as well as to contradict the statement in the article referred to, that "The Highland Society threw out *both*, and decided in favor of one of Bell's," I beg the insertion in your columns of the following *proofs*—premising simply, that one of *the two* trials referred to in the article which you quote, was the "*Hurricane trial*" by the Cleveland Ag. Society, made last year, after I had left England; and the other was made by a majority, only, of a committee of the same Society this year, awarding to *Garrett's* machine, (a prominent manufacturer, residing not far distant from the place of exhibition,) the 1st premium, on account of some supposed improvements made on Mr. Hussey's machine, while mine was at this *same* trial "highly commended, and considered, by a minority of the committee, equal in merit to Garrett's, and would have been awarded the 2d premium, over two other Hussey machines, had one been offered—while Mr. Hussey himself, for an exhibition of one taken this year from the U. States, was credited in the *report* for "*much ingenuity in some respects*." I have only to add, that, as was subsequently explained in a letter by Mr. Valentine, the farm manager at the Royal Agricultural College, and *owner of the Garrett machine*, operated in that trial—the waste of wheat, as stated in the report of the trial, was, not per acre, but on a lot of *three acres*—the *proportion* between the two machines, as stated, being correct.

Letter of the Hon. Wm. Miles, M P.

As one of the jurors appointed to test the merits of the different reaping machines, exhibited last year at the exhibition, it will be impossible for me to say and write more than I did then. I am truly glad that our decision has now been sustained by repeated trials. I remain, dear sir, faithfully yours, W. Miles. *Leigh Court, Oct. 4th*, 1852.

Albany, Nov. 17,1852. C. H. McCormick.

[*From the New-York Herald.*]

THE RIVAL REAPERS IN ENGLAND.

We have published reports of the several trials, both in this country and in England, of rival reapers and mowers by various agricultural associations during the present year. The *Economist*, a London Journal of high character, sums up the more important tests of the respective merits of rival machines which have been made during the late harvest in England, as follows:

Reaping Machines.—We have purposely abstained from commenting upon the various accounts of the progress made in reaping corn by machine, until the termination of the harvest should enable us to form some estimate of the success of this new class of instruments, and to ascertain which of the several competing reaping machines has proved the most effective. Enough has been done by the use of the reaping machine to prove that ere long it will in a great measure supercede hand reaping on large farms. Even now great economy is obtained by using the machine, and there seems reason to believe that great improvements will be made in the different machines now before the public. The following are reports on comparative trials made between rival reaping machines. The first was a trial between Hussey's American machine, as manufactured by Croskill, and Mr. Bell's original Scotch machine. The trial took place on the farm of Mr. Watson, of Keillior, in the presence of a numerous party of distinguished land-owners and agriculturists.—The award of the judges was strongly in favor of Bell's machine.

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The next extract is from the report of a committee of the Driffield Farmers' Club in Yorkshire, in a trial between Hussey's and McCormick's machines, in which the decision was in favor of the latter, and the following contains their reasons for that decision:—

McCormick's machine is six feet wide, and Hussey's five; but as it would be impossible always to keep up a cutting exactly to these widths they conceive that six inches less is all that can be calculated upon, and at those widths, viz: five and a half and four and a half feet, and the horses moving at an average speed of two and a half miles per hour, (a speed which your committee would recommend,) Hussey's machine would in five and half hours cut exactly seven and a half acres; while in the same time, and with full as little horse power, McCormick's machine would do nine acres and twenty.six poles. Another matter worthy of consideration is, that one man only is needed to drive the horses in McCormick's machine, the horses being yoked abreast, while two are necessary in Hussey's, the horses having to draw in a line. McCormick's machine also possesses another advantage in having a wooden reel, which, without any injury to the corn, materially assists the man who pulls away the sheaves, and gives him a better opportunity of adjusting their size. But the greatest superiority of McCormick's machine over Hussey's, which your committee have to notice, is, that the sheaves when pulled off, are laid in such a way as not to impede its working so that two men and two horses may move on uninterruptedly, leaving the rest of the laborers to be otherwise employed; while in Hussey's the sheaves are left behind, and a sufficient number of workmen is, consequently requisite to remove them, so that the machine may go on. This, your committee need not point out, is a grave objection, more especially when the crops are much mixed with clover seeds, and when it is desirable to let the sheaves remain unbound for a few days.—Your committee are further of opinion that from the violent reverbratory motion imparted to every part of Hussey's machine, durability is not to be expected; and that the form of the serrated cutters in McCormick's machine is far preferable to the deeply indented cutters in Hussey's, and that they will not nearly so often need renewing.—In giving a decided preference to McCormick's, their opinions were unanimous.

The report concludes with the following very sensible remarks on the effect produced on the agricultural laborers, by the increased use of machinery in husbandry:—

As your committee have already stated their opinion of the utility of well constructed reaping machines on the interests of the farmers, it may not be improper to state, what, in their opinion will be their effect upon the condition of that useful and necessary class, the farmers' laborers. They conceive they would be at no loss for arguments to prove that in whatever branch of industry, machinery has been the most extensively useful, the condition of the operatives (however paradoxical it may appear) has been improved in a corresponding degree. For proof of the truth of this assertion, your committee need not go into the West Riding or Lancashire, but may confine themselves to a branch of our own industry immediately under the observation of every one connected with agriculture; and as one fact is worth many arguments, they may call attention to the effects that thrashing machines, drills, and many other implements for facilitating and lessening the necessary operations of agriculture, have had upon the condition of the laborer, and we shall find, that notwithstanding the immense increase of the laboring poor upon a limited surface and their improved condition, that their predicted fears of the baneful effects of the introduction of machinery were altogether chimerical and unfounded, and that instead of considering themselves likely to be injured by the shifting of severe bodily labor to animal or steam power, they are reaping an advantage which, properly understood, ought to be hailed by them as a boon as no advantage can be gained by any class, that will not ultimately be spread over the whole community.

A third report is of a trial between Hussey's machine, manufactured by Garrett, and McCormick's, made by Messrs. Burgess & Key, which took place on the Agricultural College farm, at Cirencester. Here also, McCormick's seems to have been preferred:—

That, upon examination of the fields in which the crops had been cut, we found the work to have been generally well and satisfactorily done by both machines, but the stubble left by Hussey's appeared in all descriptions of grain, rather the neatest and most even. In each case it had been considered necessary to follow with the horse rake, which had effectually cleared up all the waste, amounting, it was found on the wheat stubble to 2½ bushels per acre after McCormick's, and 3½ after Garrett's machine. The wheat fields we considered to have been favorable for the working of the machines being generally level and clean, and to have presented fair average stand up crops, in no places much laid, such as were likely to have produced in a fair yield, about, probably thirty bushels per acre or rather more. The beans, a moderate crop, drilled twenty-two inches apart, had been cut principally by McCormick's machine, which had made very fair work; and the small portion upon which Hussey's had been tried was equally well done in both instances, leaving a more tidy stubble than the scythe which had been applied to an adjoining portion of the crop. A crop of oats of about twenty-five acres, which we inspected had been cut by the machines, and the oats were lying on the ground. The part cut by Hussey's appeared the cleanest and best work, but we considered either sufficiently well done.—We made a careful inspection of the working of the two machines in a field of barley, laid down with clover and rye grass. The barley was estimated to produce about four quarters per acre on the average, but not equal throughout, a portion being estimated at five quarters, while other parts were but only at three quarters, the clover being regular and very luxuriant, particularly where the barley was lightest. We considered this crop, from its nature, to be a severe trial to the machines, though the day being fine and the clover dry, were points much in their favor. The work made by each of them was highly satisfactory, and where the barley stood up, in point of cutting everything which could be desired, and, even where partially laid, not much to be found fault with. Hussey's cut the stubble lowest, and left it rather the more even of the two; but in more than one instance during our inspection it clogged so as to require the machine to be stopped, in order to clear the knives, an accident likely, in our opinion, to have occurred more frequently, and to have presented a serious obstruction, had the crop been wet, or even dew damp.

From this objection, McCormick's appeared to be free, as far as our observation went; the serrated cutters always clearing themselves, and its delivery was in this crop very superior, as the barley was laid out regularly by the one man on the machine conveniently in small heaps, with the ears generally upward, while the two men who were employed in Hussey's to effect a lateral delivery, though apparently laboring more severely, could not deposit the barley so regularly, or in so good a form. The pace at which it was necessary for the horses to walk, in order to secure the proper working of the machines, appeared to us a most material feature in their relative claims. The horses which drew Hussey's machine, were driven by a man riding on the near horse, and were kept going at a fast walk, which we estimated at nearly four miles per hour—certainly at a speed far exceeding the ordinary walk of regular cart horses; and this speed appeared necessary to insure efficient working, a requirement which must be very distressing to heavy horses. We find, indeed, complaints to be prevalent as to this machine, that the work is too severe for a pair of horses for the whole day, which necessitates either more being applied, or the horses being changed, which of course increases the expense. McCormick's, on the contrary, was driven by a man seated on the machine, at the ordinary pace of cart horses—say two and a half miles per hour, a rate at which a pair of horses might work a whole day, as at plow, and with as little distress; for this machine appears not only to be lighter in itself, but to work with more ease to the horses than the other, being so balanced as to throw a very slight pressure upon the horses' back, while the weight on the pole of Hussey's is very considerable. We did not test particularly the quantity of work done by each machine in a given time; though in the accounts recorded by Mr. Valentine, of the performances, it did not appear that there was much difference in them in this respect, each cutting between five and six roods per hour, on the average. We consider, however, that if McCormick's machine, which clears a foot wider space than the other, is the lighter and less distressing to work, it must cut the greatest quantity, moving at that steady ordinary pace which we deem not only most desirable for the sake of the horses, but also for securing the continuous delivery of the sheaves with precision and regularity, and that any increase to be obtained by driving the horses beyond that speed would be dearly purchased. We are therefore, of opinion that of the two machines thus tried, McCormick's has the advantage in lightness of draught, security of cutting, and clearing itself under adverse circumstances, and in the more convenient delivery of the sheaves.

The report concludes by stating that both machines possess many merits, and "are capable, even in their present state, of doing much service to the farmer, but that both are susceptible of very great improvement." A challenge has also been given and accepted, for a trial between Bell's and McCormick's machines. Nothing is more likely to produce improvement in this very valuable addition to our rural machinery, than the active competition which is in existence between the makers of the rival implements.

[*From the Sunderland Times of Sept.* 18, 1852]

Reaping Machines.—Mr. McCormick has been in this neighborhood, during the past fortnight, awaiting the acceptance of his challenge to all other machines to come and compete. No competitor, however, made its appearance. At Fulwell, at the end of last week, and at Washington on Wednesday, Mr. McCormick, consequently had the field to himself, and the trials were such as to afford additional evidence of the justness of the conclusion come to by the judges at the recent Durham County Agricultural Show, as well as the still higher verdict of the jurors at the great Exhibition. Though however, Mr. Bell was not present on these occasions, he was expected to come southward shortly, and unless the season were too late, or Mr. McCormick gone, a contest was anticipated between the American and his northern rival. We see it stated by the *Scotsman*, however, that Mr. Bell's advisers have advised him not to accept the challenge of Mr. McCormick, so that Mr. McCormick is denied the opportunity in this neighborhood—probably the only part of the kingdom in which any field for the purpose remains uncut—of exhibiting, on the same field, the superiority of his reaper over that of Mr. Bell.

Home Embellishments.

A dwelling house, no matter what the style, standing alone, either on hill or plain, apart from other objects, would hardly be an attractive sight. As a mere representation of a particular style of architecture, or as a model of imitation, it might excite our admiration, but it would not be an object on which the eye and the imagination could repose with satisfaction. It would be incomplete unless accompanied by such associates as the eye is accustomed to embrace in the full gratification of the sensations to which that organ is the conductor. But assemble around that dwelling subordinate structures, trees, and shrubbery properly disposed, and it becomes an object of exceeding interest and pleasure in the contemplation. It is, therefore, that the particular style or outward arrangement of the house is but a part of what should constitute the general effect, and such style is to be consulted only so far as it may in itself please the taste, and give benefit or utility in the purposes for which it is intended. Still, the architectural design should be in harmony with the features of the surrounding scenery, and is thus important in completing the effect sought, and which cannot be accomplished without it.

A farm with its buildings, or a simple country residence with the grounds which enclose it, or a cottage with its door-yard and garden, should be finished sections of the landscape of which it forms a part, or attractive points within it; and of consequence, complete each within itself, and not dependent upon distant accessories to support it—an *imperium in imperio*, in classic phrase. A tower, a monument, a steeple, or the indistinct outline of a distant town may form a striking feature in a pictorial design and the associations connected with them, or, the character in which they are contemplated may allow them to stand naked and unadorned by other objects, and still permit them to fill up in perfect harmony the picture. This idea will illustrate the importance of embellishment, not only in the substitution of trees as necessary appendages to a complete rural establishment, but in the erection of all the buildings necessary for occupation in any manner, in form and position, to give effect from any point of view in which the homestead may be seen. General appearace should not be confined to one quarter alone, but the house and its surroundings on every side should show completeness in design and harmony in execution; and although humble, and devoted to the meanest purposes, as a portion of these erections may be, yet the character of utility or necessity which they maintain, gives them an air of dignity, if not of grace. Thus, a house and out-buildings flanked with orchards, or a wood, on which they apparently fall back for support, fills the eye at once with not only a beautiful group, in themselves combined, but associate the idea of repose, of comfort, and abundance—indispensable requisites to a perfect farm residence. They also seem to connect the house and out-builddings with the fields beyond, which are of necessity naked of trees, and gradually spread the view abroad over the farm until it mingles with, or is lost in the general landscape.

If it be necessary to build in good taste at all, it is quite as necessary that such good taste be kept in view throughout. A country dwelling should always be a conspicuous object in its full character and outline, from one or more prominent points of observation; consequently all plantations of trees or shrubbery in its immediate vicinity should be considered as aids to show off the house and its appendages, instead of becoming the principal objects of attraction in themselves. Their disposition should be such as to create a perfect and agreeable whole, when seen in connection with the house itself. They should also be so placed as to open the surrounding landscape to view in its most attractive features, from the various parts of the dwelling. Much in the effective disposition of trees around the dwelling will thus depend upon the character of the country seen from it, and which should control, to a great extent, their position. A single tree, of grand and stately dimensions, will frequently give greater effect than the most studied plantations. A ledge of rock, in the clefts of which wild vines may nestle, or around which a mass of shrubbery may cluster, will add a charm to the dwelling which an elaborate cultivation would fail to bestow; and the most negligent apparel of nature in a thousand ways may give a character which we might strive in vain to accomplish by our own invention. In the efforts to embellish our dwellings or grounds, the strong natural objects with which they are associated should be consulted, always keeping in view an *expression* of the chief character to which the whole is applied.—*Allen's Rural Architecture.*

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When work season comes, work in earnest; and when the play time comes, enjoy it. Have a time for every thing and every thing in its time.

Cost of the Indian Corn Crop.

Mr. Tucker—A short time ago, you published in The Cultivator an account of the expenses and profit of cultivating corn somewhere in New-York. I have procured from one of my neighbors in the county of Chester, a statement of a similar character. He rates, I think, the number of bushels to be harvested too high, though the crop will no doubt be a heavy one, and should prefer seventy bushels to the acre until the fact was made certain, but as he is an old and judicious farmer, he may prove to be right. Very truly yours, A. L. Elwyn. *Philadelphia, Sept.* 13, 1852.

The following expenses are for cultivating nine acres of corn:—

To breaking sod, 9 days at $5.	$45 00
Harrowing, 6 days at $2.50,	15 00
Marking out, 4 days at $1.50,	6 00
Planting, 8 days, at 75 c.,	6 00
Half ton plaster,	3 25
Putting on plaster, 2 days at 75c.,	1 50
Thinning corn, 6 days at 75c.,	4 50
Two bushels of seed corn, at 75c.,	1 50
Cultivating corn, 15 days at $1.50,	22 50
Hoeing corn, 4 days at 75c.,	3 00
Cutting off corn, 15 days at 75c ,	11 25
Interest on value of land,	60 00
Husking, at 3 cts. per bushel,	21 60
Drawing in and cribbing,	15 00
Shelling and taking to market, 7 cents per bushel,	50 40
	$266 50

Estimated Product.

720 bushels corn, at 65 cts.	$465 00
Fodder, worth on the ground,	60 00
Cobs, worth,	15 00
	$540 00
Deduct cost,	266 50
	$273 50

Net profit, $30.30 per acre.

State Fairs.

Maryland.—The fifth annual fair of this spirited society, held at Baltimore, closed on the 29th Oct. This society are in possession of permanent fixtures, and their exhibition arrangements are spoken of as very superior. B. P. Johnson, Esq., Secretary of the New-York State Ag. Society, delivered the address, in which he urged the importance of education to the farmer; alluded to his recent travels in Great Britain, and the spur which American triumphs at the World's Fair would give to invention in our own country, and the effect they would have on the countries of the old world. The show of stock and poultry was fine, and all the departments were well represented.

Indiana.—The first Agricultural Fair of this State was held at Indianapolis on the 20th Oct. The fair, though characterised by the imperfection that marks the incipient stages of any enterprize, may safely be called successful. The show of stock was good, and some of the horses and grade cattle were fine. A variety of implements were on exhibition, and Manufacturer's and Mechanic's Hall were completely filled. The fair was, upon the whole, a good beginning in a good cause.

Georgia.—The fifth annual exhibition of this society was held at Macon, the 20th Oct. It is said to have been in the highest degree creditable to the State, and to compare favorably with those of previous years. Cotton gins, winnowing machines, corn-grinding and crushing machines were represented in great profusion. The vegetable department was one of especial interest, and the monstrous ears of corn, fine wheat and large beets, attracted much attention. The crops in the State are remarkably good, and that of cotton very large.

American Institute.—The annual exhibition of this society has recently closed. The show of implements and new inventions was unusually large and varied. That of cattle was fully equal to any previous show. The receipts were about $25,000, being 20 per cent. over that of last year. It is estimated that 200,000 visitors attended the fair, during the four weeks it was open to the public.

NEW PUBLICATIONS.

British Eloquence, embracing the best speeches of the most eminent orators, by Prof. C. A. Goodrich. Harper & Brothers, New-York.

The very best specimens of British oratory are collected, arranged and commented upon, with a view to furnish models of style and connected thought to the student. The speeches of Chatham, Burke, Fox and Pitt, are presented with an introduction to show the circumstances of the case, the state of parties and the point at issue Extracts are also made from the speeches of Lord Mansfield, Mr. Grattan, Mr. Sheridan, Lord Brougham and others. The work will supply a want which every student has felt, and its perusal cannot fail to form a taste for the more solid and substantial subject matter, which is the theme of superior oratory. There is no study which has so direct a tendency to draw out thought and educate the mind, as the close methodical reading of master pieces of eloquence. Prof. Goodrich has accomplished a good work, and one which will be duly appreciated by the scholars of the country.

The History of Romulus, by Jacob Abbott. Harper & Brothers

This little volume is written in a style to adapt it to the young mind, and is full of interest. Descriptive illustrations embellish the pages.

Cornelius Nepos, with notes, historical and explanatory, by Charles Anthon, LL. D. Harper & Brothers, New-York.

This familiar friend of school-boy days is out again, as good as new—somewhat increased in bulk and well dressed. As is usual in Prof. Anthon's works, two-thirds of the book is made up of notes, which diminish the amount of study necessary to master the author in about the same ratio.

Bleak House, No. 9, is now issued, in which new characters appear.

The above publications, of Harper & Brothers, are for sale by E. H. Pease & Co., of this city.

Arthur's Home Magazine, published by T. S. Arthur & Co., Philadelphia, at $2 a year.

The well known editor of the Home Gazette, has brought out a monthly, which is to be composed, to a certain extent, of the best articles in his weekly, and is designed to furnish choice reading for the family circle. The writings of Mr. Arthur are of a pleasing character and a moral tendency, and will form the attractive feature of the magazine.

NOTES FOR THE MONTH.

To Agents and Postmasters.

We invite your attention to the article on the first page, and to the Prospectuses of The Cultivator, and our new weekly journal, The Country Gentleman, published on the last page of this paper. In these you will see the development of our plans for 1853, which we doubt not will meet your approbation, and for which we ask your hearty and energetic support.

Notwithstanding the reduction in price of The Cultivator, we intend it shall be fully equal in merit to any of our previous volumes. It will be, considering the amount of matter given, the cheapest, while we shall be enabled, we trust, by the facilities afforded by its connection with our weekly sheet, to make it, if not the best, at least equal in merit to any of our monthly agricultural journals.

To all who want a weekly journal, especially devoted to the interests of country life—to rural improvement in all its branches, we commend The Country Gentleman, which we intend shall combine all the advantages of an Agricultural, Horticultural and Family Journal, and be worthy of a place at the fireside of every household.

We are already under great obligations to our friends who have labored so steadily, year after year, to promote the circulation of our work. They have benefitted the public as well as us; and we ask their continued kind offices in behalf of The Cultivator for next year, and our new work, The Country Gentleman. The price of The Cultivator is now so trifling that no farmer who has any ambition or any desire to improve, can refuse to take it if properly applied to; and we look with confidence to the efforts of our friends, for a great increase in our circulation next year.

We have intended to send Prospectuses to all those who have heretofore acted as Agents; but if any have failed to receive them, they will please give us notice, that other copies may be sent.

☞ To any of our subscribers who are disposed to act as agents, we will send Prospectuses and sample numbers, on application.

☞ Agents.—We should be glad to secure active and energetic Agents for our papers, in every part of the country. Those disposed to act as Agents, will please address us on the subject.

The Country Gentleman.—We have selected this title as peculiarly adapted to express the purpose and character of our weekly journal, and our opinion has been strengthened by the flattering reception the specimen number has generally met with. While a strictly agricultural title is too narrow in its signification to convey the intention of such a paper, The Country Gentleman is at once simple and comprehensive, while it expresses what every man should be, and what most men claim to be. The farmer is the true representative man of the age, the embodiment of the calm thought and sound sense of his time—the true gentleman. It is for such men that our paper is intended—it is for them we labor, and we hope to make our journal a welcome and looked for visitor at the fireside of every Country Gentleman—to the sunburnt farmer in his unpretending house, to the amateur in his vine-clad cottage and garden of flowers, as well as to the gentleman of leisure who seeks in country life, the enjoyment which was denied him in early years of business and constant toil.

Agricultural Chemistry at Yale College.—We are pleased to learn that Prof. John A. Porter takes the place of the lamented Norton, in the School of Applied Chemistry at Yale College, and that the usual course of lectures on Agricultural Chemistry will commence on the 7th of January, and continue for ten weeks. Prof. Porter has devoted several years to the study of Agricultural Chemistry, both at home and in Europe, and we know of no one whose knowledge of the subject, better qualifies him to succeed Prof. Norton.

Persons attending this course are not necessarily otherwise connected with the College. It is intended for farmers, and will be made so plain and practical that all can understand and apply it. The subject will be illustrated by numerous experiments, including the analysis of soils and manures, the process for which will be explained in detail.

Persons attending the lectures have access to a valuable library of agricultural works, with which they may occupy their leisure time. The fee for the course is $10. Those desirous of engaging in the practical analysis of soils, manures, &c., in the laboratory, may do so at an extra charge.

Facilities are also afforded to those who wish to pursue chemistry experimentally, with the object of applying it in manufacturing or mining, or with the design of becoming teachers. For further particulars, address Prof. John A. Porter, New-Haven, Conn.

Science and Experiments.—We are glad to observe a determination with some farmers to settle disputed points by a resort to actual experiments, in connection with the suggestions of science. Performing experiments without the guiding light of science, is like trying to make money without keeping any accounts—the man may sometimes get considerable sums, but he cannot for the life of him tell by what operation he has made it, nor how he is likely to be successful again. So, in a random experiment, the farmer may succeed finely, but he cannot guess which of the dozen operating causes has had the most influence; which is essential and which useless—nor *why* he has succeded. It is true, he may find out after repeated trials, like the blind man who goes over a piece of ground till he becomes familiar with all its parts, which the light of vision would have revealed to him at a glance. On the other hand, science not corroborated by experiment, is but little better, being not unlike that of the ancient philosophers, who preferred to shut themselves up in the closet, and by profound abstract reasoning for a life time, found out what they could at once ascertain by a few minutes of manipulation. Both are as needful and useful as the two rails of a railroad,—we should make rather sorry work in trying to run the train upon one alone. It is true, we know more at present through the teachings of experiment than of science; but this is because we have the practice of many thousand people through many centuries, which quite overbalances the scientific investigations of the few who have labored in the present day. Wait till we have as much labor expended under the light of science, as has been done in the dark, and the balance may fall on the other side of the account.

University of Albany.—It has been inferred from our notice of this institution last month, that the course of Agricultural Instruction has been abandoned. This, however, is not the case. It has only been deferred for the present winter, on account of the lamented death of Prof. Norton, and the inability of the trustees to procure a suitable person to fill his place. It is to be hoped that a suitable Professor will be found before another year, to go on with the course of agricultural instruction; and it is the intention of the trustees eventually to place this branch of industry on a firm foundation. The Law and Medical Departments of the University, are now in successful operation, with a most competent corps of Professors; and considerable progress has been made in preparing the grounds upon which the Observatory is to stand, and its completion is confidently expected the ensuing year. Efforts will be made to bring the plan of the University before the public and the Legislature the coming winter, and we certainly hope with success. The proposed Institution is worthy of the support of every well wisher of science, and is demanded by the age.

Agriculture at Amherst College.—The importance of instruction in agriculture is beginning to be felt more generally in our colleges. The trustees of Amherst College have made a decided and most commendable movement towards the establishment of a school of Scientific Agriculture, by the addition of two professors to the present faculty, viz: Wm. S. Clarke, of Easthampton, Professor of Analytical and Agricultural Chemistry, and Rev. John A. Nash, of Amherst, Instructor in Agriculture. It is to be hoped that other colleges will follow this example, as fast as suitable men can be secured.

Locy Apple.—We have received some specimens of this apple from Mr. Charles Du Bois of Fishkill Landing, of which, though not yet in perfection, we have formed a very favorable opinion. Mr. D. B. informs us that the original tree has been in bearing for forty years or more, though its fruit has been but little known out of its immediate neighborhood; and that it, with the young trees which have been worked from it, have always been regular and good bearers. The young trees are of rapid and vigorous growth; and he considers it a valuable acquisition to our list of apples, and worthy of extensive dissemination.

Soil Analyses.—A writer in the Hampshire and Franklin Express, published at Amherst, Mass., bears the following testimony to the value of soil analyses:

Mr. Wm. P. Dickinson, of Hadley, had a field of eight acres, thoroughly grown over with moss, almost as thick and matted as the wool on the back of a sheep, that will give a ten pound fleece. The land, of course, must have been exceedingly unpromising for any crop. He procured an analysis of it by the late Prof. Norton, and was told that it was deficient in two or three ingredients which could be cheaply supplied. For the analyses and a long letter, advising how to supply the deficiencies in the cheapest possible manner, he paid $10, and was laughed at, as commonly happens, when a man ventures a step out of the beaten track. He plowed that field, and treated it in every respect, as Prof. Norton advised, with the exception of here and there a couple of rows, which were cultivated as he would have cultivated the whole, if he had not been otherwise advised.

The result is a crop of corn, equal perhaps to 20 bushels to the acre, where cultivated in the old way, and very near 50 bushels, where cultivated as Mr. Norton advised. This, I know, all might have been, and yet there be no increase of profit, for the extra corn and fodder (both more than doubled) might have cost more than they are worth. But it was not so in this case. Mr. D., after keeping an exact account of the expense, gives it as his deliberate opinion that the increased profit, in consequence of Mr. Norton's advice, is at least $50 this year; and besides this, he has better hopes for that land hereafter, and has, moreover, several fields of similar land adjoining that, to which Mr. Norton's prescription will apply. He values the advice much higher than its cost, for its future application to each of those fields.

French Merino Sheep.—Gen. R. Harmon of Wheatland, Monroe county, recently returned from Vermont, with about thirty choice French Merino Sheep, procured from S. W. Jewett, Esq., of Middlebury. They were all young and splendid animals, and were, with one or two exceptions, all selected from Mr. Jewett's importations from France, during the past season. One ram, ten and a-half months old, with a very fine fleece on his back, weighed 166 lbs.

Suffolk Pigs.—Any person having genuine Suffolk pigs, or indeed those of any pure breed, for sale, would do well to give notice to that effect through this paper, as we frequently have inquiries for them, and do not know where to direct our friends for them.

Founder in Horses.—A correspondent in Moore's New-Yorker, gives the following remedy as uniformly proving successful. Add half a pint of vinegar to a gill of ground black mustard, and administer the mixture. Then put him in action for an hour or two, or until he sweats thoroughly. This remedy must be applied within 48 hours of the foundering.

Bloody Murrain.—A correspondent of the Genesee Farmer states that the best preventive is plenty of pure water and salt at all times, the latter mixed with a little sulphur—with a table spoonful of pulverized rosin once in three months; and the best cure, which must be applied at the earliest stage, is a large dose of rosin, followed with draughts of a decoction of smart-weed. He thinks from examinations, that the kidneys are the seat of the disease, and hence the utility of rosin.

"Milch cows, in winter, should be kept in dry, moderately warm, but well ventilated quarters; be regularly fed and watered three times a day, salted twice or thrice a week, have clean beds, be curried daily, and in addition to their long provender, they should receive succulent food morning and evening."

McCormick's Reaper.

Review of the Report of the Committee on the Trial of Reaping and Mowing Machines at Geneva.

New-York, Nov. 13th, 1852.

Mr Editor—With your permission I now proceed to redeem the promise made in my card, published in the Sept. No. of the Cultivator, to *prove* from the facts reported by the Committee of the N. Y. State Ag. Society, at their trial at Geneva, in July last, as well as as from other facts not reported by them, the superiority of my reaping and mowing machine over all others in use—the *award* of said committee to the contrary notwithstanding.

This Report—since published in pamphlet form—says: "The established principle in machines, in regard to cutting tools, that an acute angle is the most effective on substances of woody fibre, seems to hold good in the form of a reaper knife; this is apparent upon comparing the angles of the several knives, as for instance the height of Mr. McCormick's knife, from its base line to the apex, is five-eighths of an inch, the base being 4¾ inches; the power required to cut a swath *six feet wide*, advancing at the rate of 101 feet per minute, was 5 pounds 31-100 for every inch, in width of the swath. The height of Mr. Burrall's knife, (Hussey's in principle, and which received the first premium as a *Reaper*) above the base is 3½ inches, the base being 3 inches; in this case the power consumed to advance 103 feet in a minute, is 6 pounds 66-100, the swath being *five feet wide.*"

This *principle* is further explained by the committee, as follows: "McCormick's machine cuts with knives of a peculiar form, being broad at the base, short in length, and having a *sickle edge*, *working between spear-shaped teeth or fingers.*" Again, as tested by the *dynamometer*, the power per inch of cutting edge required to operate *Manny's machine* in *reaping*—which received the 1st premium for *mowing*, and for reaping and mowing combined—was found to be 26⅓ per cent. more than mine, (5.2 and 6.6) and in *mowing*, 27 per cent. more, (4.8 and 6.1.) And the power required to operate Mr. Burrall's machine, was still more than that required to operate Mr. Manny's, as ascertained by the same test.

Now I submit whether it would be possible to establish the superiority of the cutting power of one machine over another, more clearly and conclusively than is here decided, of mine over Manny's and Burrall's, by a test that could not err. A *patented* philosophical principle is introduced into the cutting apparatus of my machine, by which 27 to 30 per cent. of the motive power is saved, as demonstrated by a practical test, and accounted for in the plain reasoning of the *report*, which is unanswerable! This *proved*, and all that can then be said of *Manny's machine* is but *so much more* for mine; and I therefore claim the *award* made to him, as one made to me, and thus to have both report and award in my favor, for with the single exception of the *particular manner* of "raising and lowering it," to effect which its construction is materially deteriorated in other respects, it is substantially my machine in *principle—without my improvement*, as explained.

And here comes the "*imposition*" resulting to the public from *such awards*, alluded to in my former card, and which will further appear hereinafter. A patented machine goes from one of these trials with the endorsement of the committe of a State Society, as the *best machine*, without regard to whether the particular *feature* in it claimed as new, or patented, is the ground in whole or in part, of its alleged superiority—or what features in it are indentical with those of other machines; but the owner immediately disposes of it, or offers it, as the case may be, as *the premium machine!* To meet this difficulty, it was proposed, (by my representative) to the committee, at the trial in question, to call out and present to the public, the claims of the different parties entering the lists for competition, to novelty and utility; and the proposition was understood to have been agreed to, but was not carried out.

To effect the "raising and lowering" of Manny's machine at pleasure, while progressing at its work, as is claimed, its construction is complicated; while as a *Reaper*, its proportions are forced, contracted, and so imperfect as to be next to a failure in every day practice, which view, too, is sustained by the following, from the Geneva report: "The delivery is not perfect, owing to an elevation of the upron or platform, which rises about eight inches above its lowest plane. The necessary consequence is an uneven or disturbed condition of the gavels." Nor is this *raising and lowering*, after all, of importance, for it is preposterous to talk of the same man, at the same time attending regularly to driving the team, and constantly to adjusting the machine to the inequalities of the surface of the ground, and getting over obstructions in the way, which are often concealed from the eye; and the *best* regulator of this in *grass* cutting, where alone it is required, is a self-adjusting arrangement, that enables it to accommodate itself to such inequalities—as mine is *now* constructed.

From what has already been shown from the Geneva report, together with the further statement therein made, that *two acres of grass were cut by my machine in 56 minutes*, and the same by Ketchum's, (Hussey's principle, which obtained the 2d premium for *mowing*) in one hour and 26 minutes, with a *blank* opposite to Manny's & Burrall's—(the latter a *failure*,) taken in connection with what is known throughout the country—the world, I might say—of the general operation of my machine, I might perhaps "*rest*" *here.*

But it may not be amiss to notice a few other points in the case; and first I shall make a further reference to the *figures* of the report, beginning with *Seymour & Morgan's* Machine, for which was awarded the *third* premium (over mine,) and it being perhaps a *closer imitation* of mine than any other—*some* evidence of which is found in the fact that in a late suit vs. them, for infringing my patents, a New York jury found a large *verdict* in my favor. And as this is a *strong case* to exemplify both the *character* of the Geneva report, and the injurious results to the community growing out of *such* reports, I trust to be excused for dwelling somewhat upon this case. And by way of fortifying the judgment of the *jury* in the case, and so far refuting the many misstatements made by these and other *infringers* prejudicial to my just claims, I must beg leave to make a short quotation from the *charge* of Judge Nelson in the case, as follows:

"It is said by the learned counsel for the defence, that, admitting all this to be true, just as it has been described, and claimed in the patent, that still there was not novelty or skill enough in it to constitute an invention within the meaning of the patent law; and some of the witnesses called as experts, have expressed the same opinion.

"Now, as bearing materially upon this question of ingenuity and skill, essential to bring out the improvement claimed by the plaintiff, it will be well to recur for a moment to the history of the improvement. Snebly tried it in 1833 and '34. You, gentlemen, remember his account of it; and he said he had been engaged in experiments upon it since 1825 or '26, and had abandoned it. His contrivance was to bring the grain to the raker, so that he could rake it off and stand on the machine. Hussey tried it, used the same device and arrangement, and gave it up. The patentee has been engaged since 1834 in experimenting and improving his machine, devoting his whole time to the production of a successful reaping instrument, and he did not succeed in getting a practical position for the raker on the machine until the year 1846 or '47, and nobody had accomplished it before, although we are now in the middle of the nineteenth century. These are the only persons, those to whom I have alluded, for aught there appears, who have ever undertaken the experiment, or to work it out, and the patentee is the only one who has succeeded, notwithstanding it is supposed to be so very simple, that any ordinary mechanic, laying his eye on the machine, could work out the result without the necessity of any other ingenuity."

Now this *trial* was for infringements of my *third* patent, the trial for infringements of my *second* patent, embraced in the same suit, having been evaded by the oath of the parties to the absence of a witness *whose deposition had been taken!* Since the trial of this cause, these parties, through *three* of their *counsel*, and several of their *interested* "witnesses called as experts"—a dozen signers all told—have circulated extensively a pamphlet reiterating their *false* statements of want of novelty, skill and utility in *all my claims* to improvements in reaping machines. Of course they will *now* be believed!

So much for the *character* of another of the *premium* machines.*

Next, as to the *report of facts* in relation to it; and here I shall take down from the "tabular statements" the figures representing each of the *premium* machines, as follows;

REAPING.

	Time consumed in cutting two acres.	*Absolute draught.*	*Draught per inch, of cutting edge.*	*Width of Swath.*	*Mode of delivery.*	*Quality of work 50 being perfect, and 25 the work of a cradle.*	*Condition of the gavels.*	*Condition of the stubble.*
	h m.	*lbs.*	*lbs.*	*feet*				
Manny's, ...	2.34	400	6.6	5.6	*side*	31⅓	*une'n*	*good*
Burrall's,.	2.48	400	6 66	5.0	*side or back*	33	*good*	*good*
S. & Morgans'..	1.35	425	5.91	6.0	*side*	29	*good*	*good*
McCormick's,..	2.23	375	5.21	6.0	*side*	30	*good*	*good*
			MOWING.				*Av. of stubl'e.*	
Manny's,......	....	400	6.1	4·6		34	2½	*clog twice*
Ketchum's, ...	1.26	450	8.	4.8		33	3½	
Mc'Cormick's, .	56	350	4.8	6.		16½	5	*do freqnt'ly*

Having already referred to the great difference in the drafts of these machines, in favor of mine, from the figures given above, a word only need be added in relation to them. From them it is seen that my machine cut the two acres (of grass) in *less time than any other;*—and, notwithstanding that, from the *tables*, in *every point of difference, mine is found superior to Seymour & M.'s;* the award of the committee directly contradicts the *figures and facts.* Again, my machine cut a swath a foot wider than Mr. Burrall's, and 6 inches wider than Mr. Manny's, and laid the grain better than *either*—"from the manner of delivery *at the side*, a twist was observable" with Burrall's.

But, in *one point*—the quality of the work, and that truly an important one—the figures in the tables show the performance of Burrall's and Manny's machines to have been better than mine. Upon *this point*, however, there was, to say the least, a difference of opinion. Your own intelligent correspondent, Mr. Editor, wrote as follows from the trial: "Hussey's machine was next tried, and its operation was fine, quite similar to that of Burrall's, dropping the grain behind the machine. Neither of these machines (alluding to Burrall's and Hussey's) was furnished with a reel, which may have been the reason that it was necessary to drive the horses at a rapid pace, too much so for all-day work with ordinary teams." Of Manny's, he says, "This was thought by some, who witnessed its operation, to be the best *combined* machine, or for using both as mower and reaper, although for the latter purpose alone, it hardly came up to some others.

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* When it is known that it requires all the muscular power of the stoutest man, at the same time to collect with his wide and heavy rake, and get the grain *directly behind the platform*, it must be clear that it can't by that process, in heavy grain, be twisted or brought round to the side of the machine. It is rather amusing, too, to observe how handsomely the "*fly wheel*" in Burrall's Machine is commented on, as a new and equalising improvement, while the same in my machine was unobserved, and which was used in it, perhaps, before Mr. Burrall ever thought of a reaping machine—certainly, before he ever made one!

It may not prove practicable to combine these two qualities to the best advantage in one machine," &c.—and further, that "one of the best machines in the field was McCormick's—like Manny's and Densmore's—("this clever machine seems not yet perfected."—*Report!*)—it cut about 6 feet wide, and in execution was not exceeded by any, *especially in lodged grain*,"—just the opposite of what is said in the *report.*

In fact, a single trial of cutting a few acres of light, dry wheat—for there was neither heavy nor damp wheat cut at the Geneva trial—is no test at all of the powers and efficiency of a reaping machine; and no stronger proof can be adduced of this, than the fact that in the late great trial between Mr. "Garrett's improved Hussey Reaper" and mine, in which there was 100 acres cut, at the Royal Ag. College, England, the decision of the Committee was in favor of the former at the close of the first day, after having cut but a few acres under favorable circumstances, while at the close, though the stubble left by Garrett's was reported to be rather shorter and neater than mine, the decision of the same committee was decidedly in favor of mine in every important particular—and when, notwithstanding any supposed difference in shortness or neatness of stubble, the *waste* after the former was found to be one-third greater than that from the latter—*winning over to the support of my machine*, the proprietors and conductors of the College Farm, under whose auspices the trial was made, and who owned the Garrett machine!

On this part of the Geneva report, I have only to add a word of explanation, in relation to the particular machine used at the trials, and its partial failure in *mowing*, of which the committee say, "The construction of this machine is *too fragile* for useful purposes, the knives yielded after a few swaths were cut, needing to be replaced by another set; these yielded also. The stubble was left long and uneven."

After the established superiority of my cutting apparatus, beyond all question, it would seem from this statement my own *fault*, if I had not the best machine; and I have been advised that this was a controlling point in the case. I have stated in my previous notice in the Cultivator, however, first, that delay on the way from Chicago, prevented me from having at the trial the machine constructed especially for that purpose; and second, that in consequence of wider spaces between the fingers of my machine than others, loose cobble stones on the surface of the ground entered *between them*, and raked the teeth off the sickle—which (stone) should not be found on meadows—but which liability *is prevented* by putting the fingers closer together. All this was explained to the committee—and apart from this, the *durability* of my machine needs no endorsements of *any committee.*

In conclusion, I have a word to say in relation to the "*unanimous*" report of this committee!—first, that one of the most practical members of it, residing in one of the best wheat districts in New-York, who carefully attended the trial through at Geneva, but was prevented by sickness from attending the State Fair at Utica, where the report and awards were made up, *was in favor of awarding the first premium for my machine*, and was "surprised at the awards that were made"—that some other members of the committee disagreed with the majority, but out of deference to their judgment, consented to let the report go out as unanimous—that agencies were offered by some proprietors of a machine to members of the committee, prior to making their awards, and in one case known to have been accepted.

Finally, permit me to add some account of the result of the Springfield trial of Reaping Machines, made last summer, by a committee of the State Ag. Society of Ohio, by way of further showing the degeneracy to which such local trials are fast sinking, and the unreliableness of them. It took place on the farm of Mr. Warden, manufacturer of Densmore's machine, and was conducted by a committee of the Ohio State Agricultural Society, at which they awarded the first premium for "Densmore's self-raker," and second for Hussey's Reaper; and for mowing, first to Ketchum, and second to Hussey's; whereupon, my brother (who attended for me) challenged the two premium machines to a thorough trial, on a neighboring farm of Messrs. A. Collins, and H. Shields, near Xenia, where Densmore & Co., had placed a self-Raker for trial, to be purchased if approved.

Many of the citizens of Xenia also united in the call for a thorough trial; but finally, Messrs. Collins & Shields were required by the owners of the Self-Raker, to decide prior to the day appointed for the exhibition, whether they would keep it, that it might be removed if not kept—when my brother, to prevent a disappointment to the public, who had had notice to attend, paid $140 cash for the machine, and then requested the owners to attend to its operation. Suffice it to say, that Hussey's Machine was not presented, (by the Ohio manufacturers of it,)—that the Self-Raker was abandoned by its owners, but was operated on the day of the exhibition by Collins & Shields, and was afterwards unsaleable at any price; that the exhibition resulted in a strong report in favor of my machine, and in the sale of it to Messrs. Collins & Shields—and in a notice of the trial in the "Xenia Torch Light," which reads as follows.—

"From the above unvarnished statement of facts, it is quite evident that the Committee at Springfield committed a gross error in awarding the first premium to the Self-Raker, the consequences of which the public interest requires should be counteracted so far as possible, by all fair means. Committees who undertake the responsible task of adjudging and deciding upon rights and interests so important, should be admonished by this, to give a more thorough investigation before publishing their judgment to the rest of mankind. In this case, the Ohio Board of Agriculture have endorsed in an official and very public manner, a machine which, as at present constructed, is and can be of no practical utility. *This is* HUMBUGGING!

If the same opportunity could have been afforded at *Geneva* for bringing the premium machines to a more thorough test, and in a greater variety of conditions of the crop, a like result would have followed. Doubtless, it has generally been observed that the great trials of the Reapers in England this year, have effectually dissipated any doubt that might have been left upon the public mind, as to the correctness of the award of the Council Medal for my reaper, by the committees of the Great Exhibition—in consequence of the result of a partial trial made at the close of the season, after I had left England. As it now is, we shall be thrown over to another reaping season for further *reaper trials*, when I design to have my machine in the field at the earliest day possible—say on James River, Virginia—that its superiority may again, as, heretofore, be contested in *any thorough manner*, and *that* in time to govern sales further north.

My machines will, this year, be manufactured in a superior style—corresponding with its superiority in *principle*—embracing some improvements in construction over those of any previous year; and arrangements will in due time be announced, for the supply of the different wheat growing sections of the country with the same. Satisfied, from the experience of the past harvest, of the *impossibility* of constructing the same machine, both for reaping and mowing, to the best advantage, as the width of a *mower* should not *exceed* five feet. for the ordinary lands of this country, while that of a reaper can as well be six feet as less, and where greater speed is essential, a *separate mowing apparatus*, with iron beam, will for the next harvest be sold to order with my reaper, at a cost of $30. Both machines warranted to operate superior to any others in use, and will be offered on trial with any other, the best performing machine, in such case, to be kept by the purchaser. For mowing alone, the machine will be delivered at Buffalo at $100. C. H. McCORMICK.

NEWLY PATENTED

MOWING AND REAPING MACHINE,

BY HORACE L. EMERY, OF ALBANY, N. Y.

SUCH has been the condition of the people of our country, that in many portions of it, manual labor has been found inadequate to the task of harvesting grains and grasses in proper time and manner, while, in all sections, the cost of manual labor, where to be had, has often been too expensive for profitable farming.

These facts have caused hundreds of thinking minds, for some years past, to turn their attention to the subject of substituting other more expeditious, as also cheaper methods of effecting the same.

As the muscular power of the horse is known to be equal to that of seven men, while the cost per day for boarding and employing a horse, is only equal to that of one man, this source has been looked to as the most feasible.

With what success, it is only necessary to refer to the late Exhibition and Trial of Mowing, Reaping and Threshing Machinery, under the direction of the committee of the State Agricultural Society at Geneva, where were collected the finally successful results of the experiments of years by thousands of minds.

With all this before us, whoever now attempts the construction of Agricultural machinery for the above purposes, must be blind indeed, to make an unsuccessful attempt in constructing machinery for either of the above three classes of farm labor.

Therefore, the subscriber, not only having made himself practically acquainted with the construction and working of all the successful machines of this class, but having made and successfully introduced several valuable improvements in some of the above classes of machinery, which have already gained favorable and world wide reputation and adoption, flatters himself that he has also made an improvement in the construction of a Mower and Reaper of equal if not greater merit, than any of his former successful machines.

As the Engravings, Diagrams, &c., of this new one are yet in the hands of the engravers and unfinished, as also diagrams of several of those of other makers of the best standing, it will be impossible until next month, to give it a practical and mechanical description, when it is the intention to show the leading and important points in it which are new, as also to show those of the best of other makers with the differences between them.

It will suffice to say, that while this is the most compact, light, simple, cheap, durable, easy working machine—it is at the same time the most perfectly adjustable, portable and easily convertible into a mower or reaper, working as perfectly in either form as those of the best of other kinds, whether simple or combined.

The main wheel is 39 inches in diameter, 8 inches face; the whole contains but one gear and pinion and that an internal one; it has neither crank or connecting rod about it. It has a wrought iron knife beam formed of two plates, struck up into ribs, and firmly riveted together, thus forming a light, stiff, strong and hollow beam, which is suspended by means of a shaft running through its whole length, terminating at the outer end with a crank axle and wheel attached—the inner end of said shaft being connected by a lever with the driver, the beam may easily and instantly be elevated or depressed at pleasure. The frame itself is so suspended upon the axis of the main wheel, as to be elevated and depressed at pleasure, so as to secure a horizontal position to the whole machine at whatever elevation used, thus always having the cutting works in proper position.

In reaping, a reel is used, and the raker stands erect, face forward, and directly behind the center of the platform, and on a level with it, with a support about him; the movable platform being on the same plane with the frame-work at the side of the discharge, and at the same time two or three inches above the stubble. With the above introduction, and the directions and diagrams to follow, together with prices, terms of sale, warranty, &c., which will appear in next month's papers, the public will have before them the several machines from which to make a selection before purchasing for the coming season, and at the same time know what they are purchasing much better than to be guided by the very impracticably written and published report of the committee of the Geneva trial, which to be seen and carefully read will be sufficient to satisfy every one of the truth of this remark concerning the correctness of its conclusions.

As this is the age of humbug, it becomes every purchaser to look well to his dollars before parting with them for that which will prove worse than useless, and purchase only such articles as have their practical as well as theoretical merits plainly pointed out, or if not so pointed out, to purchase only of responsible manufacturers, who are willing to back their machines by their reputations and capital,

without risk or loss to the purchaser. Agricultural committees, like other men, are not exempt from being humbugged, and the public through them; while at the same time they may be composed of the most honorable and respectable gentlemen of our country, as a proof of which the published report on the Geneva trial of machinery, will be found the best evidence extant.

For further particulars concerning the Reaper and Mower above described, address HORACE L. EMERY,
Care of Emery & Co., Albany, N. Y.—Dec. 1.

The Pennsylvania Corn Stalk Cutter,

HAVING been much improved by us the present season, it is warranted the best Power Cutter in use for its Cost—and superior to any other of any kind at a less price than sixty dollars. By it the coarsest of Hay, Straw and Corn Stalks are made into the finest feed or chaff at the rate of half a ton per hour, with one horse power. Price $28.

EMERY & CO.,
369 Broadway, Albany, N. Y.

THE SATURDAY EVENING POST

THE LEADING LITERARY WEEKLY.

Over Thirty-one Years have now elapsed since the POST began its weekly round of blended instruction and amusement; and never, in all that period, was its success so marked as at the present moment. Possessing undeniably the largest circulation, by many thousands, of any paper of its class in the Union, its subscribers have the best of reasons for believing that it stands upon a permanent basis, and that they will receive the full value of every dollar intrusted to its publishers. In announcing some of our preparations for the coming year, we may begin by stating our continued connection with MRS. SOUTHWORTH, a writer who, in vigor and fertility of genius, is not surpassed by any, male or female, in the Union. MRS. CAROLINE LEE HENTZ, a lady whom it would be almost superfluous to praise, in view of the general popularity of such tales as "The Mob Cap," "Eoline," "Linda," "Rena," etc., also is enrolled among our contributors.

We are now engaged in the publication of a story entitled

CLARA MORELAND,

By Emerson Bennett, Author of "Viola," "Prairie Flower," "Bandits of the Osage," etc.

And at the opening of the ensuing year we design commencing the publication of the following Novelet:—

MISS THUSA'S SPINNING WHEEL.

By Mrs. Lee Hentz, of Florida, Author of "Eoline," "Linda," "Rena," etc.

This novelet we design following by a story entitled,

A STRAY PATCH FROM AUNT HANNAH'S QUILT.

By Mrs. Frances D. Gage, of Ohio, widely known as the author of some admirably written and very effective household poems, sketches, etc.

After this we expect to be able to commence

THE LOST HEIRESS; A STORY OF HOWLET HALL.

By Mrs. E. D. E. N. Southworth, Author of "The Curse of Clifton," "Virginia and Magdalene," "Shannondale," "The Deserted Wife," etc.

In addition to these and other Original Tales, involving a large expenditure of money, we shall lay before our readers, as heretofore, choice Tales, Sketches, Essays, Narratives, etc., from the English Magazines—such as have given the Post a name for the excellence of its selections.

ENGRAVINGS.—In the way of engravings we present at least two weekly—one of an instructive, and the other of a humorous character.

AGRICULTURAL ARTICLES, Miscellaneous matter, General News, Witty and Humorous Sketches and Anecdotes, Letters from Europe, Editorials, View of the Produce and Stock Markets, Bank Note List, etc., etc., shall also be duly given.

☞ Of course, we shall maintain for the Post the character it has acquired, of being a strictly moral paper—not ridiculously squeamish and straight-laced, but really and truly moral—such as may be taken into the family circle without fear. Advertisements of an improper character shall be, as heretofore, rigorously excluded.

☞ CHEAP POSTAGE.—The postage on the Post to any part of the United States, when paid quarterly in advance, is now only 26 cents a year. And we trust that the public generally will show their appreciation of this commendable reduction of postage, by largely increasing the number of papers taken at the various offices—that thus there may be no falling off in the revenue of the Post Office Department. *This will insure a continuance of the present reduced rates.*

TERMS.—The terms of the POST are Two Dollars if paid in advance, Three Dollars if not paid in advance. For Five Dollars *in advance*, one copy is sent three years. We continue the following low terms for Clubs, to be sent, in the city, to one address, and, in the country, to one post-office.

4	COPIES,	. . . .	$5 00	PER ANNUM.
8	"	(And one to Agent, or the getter up of the Club,)	$10 00	"
13	"	(And one to Agent, or the getter up of the Club,)	$15 00	"
20	"	(And one to Agent, or the getter up of the Club,)	$20 00	"

The money for Clubs always must be sent in advance. Subscriptions may be sent at our risk. When the sum is large, a draft should be procured if possible—the cost of which may be deducted from the amount. Address, *always post paid,*

DEACON & PETERSON,
No. 66 South Third Street, Philadelphia.

☞ N. B.—*Any person desirous of receiving a copy of the POST, as a sample, can be accommodated by notifying the publishers by letter,* (post-paid.)

☞ **TO EDITORS.**—Editors who give the above one insertion, or condense the material portions of it, (the notices of new novelets, and our terms,) for their *editorial* columns, shall be *entitled* to an exchange, by sending us a marked copy of the paper containing the advertisement or notice.

Agricultural Implements.

STRAW AND STALK CUTTERS—of all patterns.
CORN MILLS—both of Iron and Burr Stone.
CORN AND COB CRUSHERS—of Beals', Nichols' and Sinclair's make.
ROAD SCRAPERS—of several patterns.
FANNING MILLS—of all the best makers.
SAUSAGE STUFFERS AND CUTTERS—of all patterns.
VEGETABLE OR ROOT CUTTERS—of approved kinds.
CORN SHELLERS—for hand and horse power.
VEGETABLE BOILERS—of Mott's and Bent's patterns.
GARDEN AND WHEEL BARROWS—of iron and wood.
HAY AND COTTON PRESSES—Bullock's patent.
BRICK MACHINES—of Hall's and other makers.
WAGONS AND CARTS.
PLOWS—of Prouty & Mears, Centre Draft, and Rich's Iron Beam.
PLOWS—Eagle, Massachusetts make, and Minor & Hortons.

For sale at the State Agricultural Warehouse, No. 25 Cliff-Street, New-York. Nov. 1—tf.

Sausage Cutter.

THE general configuration of this machine will be understood from the engraving above. It will cut one hundred lbs. of mea- per hour, and the knives are so arranged as to have a continuous action. The machine, as represented above, is open, but when shutforms an inner cylinder through which runs the cylinder of pegs, operating against a spiral of knives. The meat is made finer or coarster, according to the rapidity with which it is fed. Price, wood frames, with one set of knives, $5—with two set of knives, $8. Iron frame $4. For sale by LONGETT & GRIFFING,

Nov. 1—3t. No. 25 Cliff Street, New-York.

Superphospate of Lime.

THE genuine article, manufactured by C. Deburg, in bags of 150 pounds each. The subscribers have made a contract for a large quantity, and are now prepared to supply any demand. Farmers and gardeners would do well to call on us before purchasing elsewhere, as we are now able to sell for a less price than heretofore offered. Every bag is branded C. Deburg, Extra No. 1.

Nov. 1—tf. LONGETT & GRIFFING,
State Agricultural Warehouse, No. 25 Cliff Street, New-York.

Important to Farmers.

IT is generally conceded by all intelligent Farmers, that cutting the food for cattle will save about from 25 to 30 per cent. Bertholf's Oblique Rotary Corn Stalk, Hay and Straw Cutter, is conceded by all that have used them, to be far superior to any other, as it destroys all hard substances in the stalk, leaving it soft and easily eaten. It turns very easy, and is not liable to get out of order, and with care will last an age. It has been awarded four First Premiums and a Silver Medal, by the American Institute, For further particulars, address, (post-paid,) the Patentee, H. W. BERTHOLF, Sugar Loaf, Orange County, N. Y., or LONGETT & GRIFFING. 25 Cliff St., New-York, who are agents. Patent Rights for sale. Nov. 1—3t.

EMERY & CO.'s

Improved Horse Power. Thrashers and Separators.

THE undersigned have been appointed sole agents foi the sale of Emery's new patent Improved Horse Power, Thrashers and Separators in the city of New-York. The State Agricultural Warehouse is the only Depot where this superior power can be had. As many powers are represented as Emery's patent, to avoid impositions, be careful to observe that the name of Emery & Co , is cast in full on every link of chain and the wheel hub.

LONGETT & GRIFFING.
July 1—tf. 25 Cliff street, New-York.

For Sale.

ONE of the most desirable farms in the Chenango Valley, 2 miles from the village of Oxford, containing 220 acres—river flat—grain land, pasture, woodland, and orcharding. A large and convenient dwelling house, two large barns, with sheds and out-houses—watered by the Chenango River—a creek on which there is a saw mill, and by never failing springs. On it are more than 700 rods of stone wall. Persons wishing to purchase are desired to look at the crops and stock on the farm. Enquire of JOHN TRACY, Oxford, N. Y. Oct. 1, 1852—3t.

ANDRE LEROY, Nurseryman at Angers, France,

HONORARY and Corresponding member of the principal Horticultural Societies of the United States, and of Europe, begs leave to inform his friends, and all the nurserymen of the Union in general, that he has made large preparations, and has now on hand a considerable stock of all the finest Evergreen Seedlings, Roses, Fruit and Ornamental Trees, &c., &c.. most suitable for the American markets. The experience of several years of putting up large orders for the United States, enables him to flatter himself that he has now all the necessary knowledge to give full satisfaction, and to assure the delivery in good order, of all the trees, &c., ordered.

He also begs to inform all nurserymen who have not already recived the Supplement for 1852, to his Catalouge of 1851, that it can be obtained free of any charge, at his agent's office, M. Ed. Bossange, 138 Pearl-Street, New-York, who will also attend to forward all orders sent to him, and to pass through the custom house. and to reship all goods ordered, without any delay, and with the greatest care.

Address M. ANDRE LEROY, Angers, France,
Care of M. Ed. Bossange, 138 Pearl-Street, N. Y. Oct. 1—3t.

United States Agricultural Warehouse and Seed Store,

No. 197 Water Street, New-York.

THE subscribers solicit the attention of the public to the large and varied assortment of Agricultural and Horticultural Implements, Field and Garden Seeds which they have constantly on hand, and offer for sale at the lowest prices and on the best terms.

Aug. 1—tf. JOHN MAYHER & CO.

Hay and Straw Cutters,

OF all styles and sizes, for cutting Hay, Straw, or Cornstalks; for sale at the United States Agricultural Warehouse and Seed Store, No. 197 Water Street, N. Y. JOHN MAYHER & CO.

Sept. 1—tf.

Super Phosphate of Lime,

FOR farming purposes, put up in bags of 150 lbs. each. For sale by JOHN MAYHER & CO.

Sept. 1—tf. No. 197 Water Street, New-York.

Horse Powers, Threshers and Separators.

Endless Chain Powers

OF all kinds ever made, for one and two horses, also cast iron Sweep Powers, for one to four horses. Threshers and Separators to match the above. JOHN MAYHER & CO.,

United States Agricultural Warehouse and Seed Store,
Sept. 1—tf. No. 197 Water Street, New-York.

Seed Wheat.

GOLDEN Australian, Mediterranean, White Flint, Canada, Black Sea, Soul's, in bags or barrels. For sale at the United States Agricultural Warehouse and Seed Store, No. 197 Water Street, New-York. JOHN MAYHER & CO.

Sept. 1—tf.

A Farmer and his Wife

WANTED, to take charge of a Dairy Farm in the town of Rye. Apply to JOHN C. JAY, Rye, Westchester Co., N. Y.

Nov. 1. 1852—3t.*

Albany Drain Tile Works.

No 60 Lancaster Street—West of Medical College, Albany.

THE subscriber has now on hand, Draining Tile of the following descriptions. Prices reduced.

HORSE SHOE TILE.		
5½ inch Rise,	or 4½ inch Calibre, ...	$18 00 pr. 1000.
4½ "	" 3½ "	15 00 "
3½ "	" 2¾ "	12 00 "
SOLE TILE.		
4½ inch Rise,	or 3½ inch Calibre, ...	$18 00 pr. 1000.
3½ "	" 2¾ "	12 00 "

These Tile are over one foot in length, and are so formed as to admit water at every joint, draining land from 12 to 20 feet each side of the drain—being the cheapest and most durable article used.

Tile sufficiently large for drains around dwellings, at $4 and $8 pr. 100 pieces. Orders from a distance will receive prompt attention.

Albany, April 1, 1852—tf. JOHN GOTT.

New and Important Insurance.

Northern N. York Live Stock Ins. Co., Plattsburgh, N. Y.

INCORPORATED by the Legislature of the State of New-York, July, 1851. Horses, Cattle, and all kinds of Live Stock insured against Death, by the combined risks of Fire, Water, Accidents, Diseases, &c CAPITAL, $50,000.

GEORGE MOORE, Plattsburgh, Sec'y.
I. C. Mix, Fort Ann, Gen. Agent.

October 13, 1851.

This company are now organized and ready to receive applications for insurance. It is confidently believed that the owners of valuable animals will avail themselves of the advantages offered by this mode of protection. If fire, life and marine insurances are proper and expedient, so is live stock insurance: the reasons for insurance are equally applicable to all.

For terms please apply to Company's Agents.

Plattsburgh, July 1—tf.

THE OHIO FARMER, AND MECHANIC'S ASSISTANT,

Edited and Published in Cleveland Ohio, by Thomas Brown.

A FAMILY Newspaper, devoted to Agriculture, Horticulture, Mechanic Arts, Literature Domestic Economy, Social Improvement, and General Intelligence.

The Wholesale and Retail Prices of all the leading articles bought and sold in the NEW-YORK, CLEVELAND, CINCINNATI and PITTSBURGH Markets, are also accurately reported each week.

The FARMER is one of the largest, and is acknowledged by all who are acquainted with it, to be one of the best Agricultural Newspapers in the United States.

Sample Copies will be sent to any part of the United States, if the request be made of the Publisher, by letter, post-paid

TERMS.—Single Subscribers $2.00. · Clubs of two or more, $1.50 each—*invariably in advance.*

A limited number of advertisements will be inserted in the Farmer at the rate of $1.00 per square, (ten lines or less,) for the first insertion, and fifty cents for each subsequent insertion.

THOS. BROWN, Publisher,
Merchant's' Exchange, Cleveland, Ohio.
Cleveland, Nov. 1, 1852—3t

The Country Gentleman.

A Journal for the Farm, the Garden, and Fireside.

The publisher of "The Cultivator," having, since the death of Mr. Downing, disposed of "The Horticulturist," has determined to carry into effect a project he has had for some years in contemplation, of establishing a Weely Journal, in connection with "The Cultivator," to be devoted to the cause of Agriculture and the Rural Arts generally. In pursuance of this plan, he has issued a specimen number. The regular publication of the Country Gentleman will be commenced on the first Thursday of January, 1853, and its scope will embrace:

I. The Farm—Including—1. The Principles of Cultivation, the Preparation of the Soil, and the most approved methods of Culture, of all the Crops grown in this country.—2. The Manufacture, Preservation, and Application of Manures.—3. The Description and Illustrative Drawings of all Implements and Machines requisite for the Farmer's use.—4. The Breeding, Rearing and Management of all the Domestic Animals, with Engravings of the different breeds.

II. The Garden and the Orchard —1. Descriptions will be given of all the Fruits, of the different varieties, suited to the various sections of the country, together with the best modes of Propagation and Cultivation —2. Select Lists and Descriptions of Flowers, Shrubs and Trees, suitable for large and small places, with directions for their Culture.—3 Special attention will be given to the products of the Kitchen Garden. a department hitherto too much neglected, as there are many plants highly desirable for the table, which have not come into general culture.

III. The Fireside.—This department will be of a miscellaneous character, embracing every variety of instructive and entertaining subjects, such as Historical, Geographical, and Biographical Notes, Literature, Natural Science, Tales, Poetry, &c., consisting of original articles and selections of a high order.

IV. Record of the Times.—Under this head will be given a concise and systematic abstract of the News of the Week, embracing briefly every thing of general interest to country residents.

V. Produce Market.—Great efforts will be made to render this department full and complete, and particularly valuable to the Farmer and Produce Dealer. A careful synopsis of the prices of Produce, Wool, Live Stock, &c., at the leading markets, will be given, as well as the condition of the crops in the different sections of the country, &c.

It will be the aim of the publisher to make the paper attractive and elegant in its typography and illustrations, choice and select in its contents—to make it indispensable to the Farmer, and desirable to every one who has a rod of ground to cultivate, or a home to beautify—and by devoting its columns to Improvement in Agriculture, Elevation in Character, and Refinement in Taste, to render the Country Gentleman the standard in its sphere

TERMS.—The Country Gentleman will be printed in quarto form, each number consisting of sixteen pages, and forming an annual volume suitable for binding, of 832 pages, at Two Dollars per year when paid in advance, or $2.50 if not paid in advance.

Albany, Nov., 1852. LUTHER TUCKER.

THE CULTIVATOR:

A MONTHLY JOURNAL OF

Agriculture, Horticulture, and Domestic Economy.

THE PRRICE REDUCED TO FIFTY CENTS A YEAR.

As the proprietor will next year issue "The Cultivator" in connection with the weekly Journal announced above, he will be enabled to reduce its price to Fifty Cents a Year, while he will have it in his power to give increased interest and value to its pages, from the fact that its contents will consist of the choicest articles which appear in the weekly paper during the month. There will be no change in its character. Its object—"To Improve the Soil and the Mind"—will be the same as heretofore. The only alteration will be in the price—a change which will procure for it, he has reason to believe, a greatly extended circulation, and consequent increase of usefulness. Certainly this will be the effect, if those who have heretofore so kindly extended to it their aid, shall act with their accustomed energy in procuring subscriptions for 1853.

In calling upon our friends to renew their efforts in behalf of the next year's Cultivator, we beg to assure them, that, while its price is so greatly reduced, we intend to make it equal in value to any volume that has preceded it; and we solicit for it, not only the good will of its friends, but their energetic efforts to greatly extend its circulation. The price hereafter will be as follows:

Single copies, Fifty Cents—Eight copies $3—any larger number at the same rate.

Will our Agents, to whom we are already under so many obligations, take hold of the work in earnest? Many have already assured us, that with this reduction of price, they could more than double their subscriptions for next year, and we trust that this will prove true with all our agents. LUTHER TUCKER.

Albany, N. Y., Nov., 1852.

Trees, Plants and Shrubs

SHOULD be transplanted South in the fall. Orders supplied from the best nurseries, at their prices. A. B. ALLEN & CO.,

Oct. 1, 1852—tf. 189 and 191 Water st., New-York.

Superphosphate of Lime.

THE only chemically pure Superphosphate of Lime, is manufactured by the subscriber, who has proofs of its being the best, from the fact of its having been tried by the farmer, by the side of the *improved*, as so termed, and likewise by analysis. The subscriber's long experience in Europe, in the peculiar manufacture, leads him to flatter himself, that he stands unequaled as a maker, and would suggest to the agriculturist the propriety of trying the effect of the No. 1 Superphosphate of Lime, before giving credence to the *puffing* of the writer of a journal who apparently takes much pains to intimidate the farmer from purchasing any but the improved, as others in the market for sale are spurious. Had not his advertisement been so glaringly misstated, and so completely groundless, and certainly calculated, to a certain extent, to prejudice materially the minds of those not conversant with the facts, and the true merits of the case, it would not have been deemed important to have replied, having up to the present time strictly avoided advertising, preferring to give it time to establish its own reputation. As a manure, I am induced now to say something, in fact, more so from the express wishes of some of the gentlemen who have tried the effects, and feel highly pleased with the results; and my statements herein contained can be corroborated. The principal object in now giving publicity, is to inform the farmers in general, that this is the best article offered as a fertilizer; the effect of which can only be proved by a trial. Branded as follows, in bags of 150 lbs. each:—"C. B. DE BURG, No. 1 Superphosphate of Lime. Keep dry." Dec. 1.

Clarke's Excelsoir Milk Churn,

FOR horse-power, can be made of any good iron-hooped cask or barrel. The dash-board, or cross-bar and ventilating funnels, are set on the irons or fixed tubes, on which the barrel revolves. Prices for next season: The Crank Churn, $2.50 to $10; irons for the Milk Churn, $1 per sett. The Excelsoir Churn is perfectly adapted to the wants of the dairymen, who, by applying early, can have the size they wish. Agents wanted to sell State and county rights. Apply to GEO. B. CLARKE.

Leonardsville, N. Y., Dec. 1, 1852 —1t*

A First Class Dairy Farm for Sale.

MY farm of 320 acres, four miles south of the village of Oxford, Chenango county, N. Y., and near the Chenango Canal. 250 acres are under high cultivation, durably fenced, and well and permanently watered. The remainder is well timbered. It has a large two story mansion, five large barns, and sheds and out houses, in good repair. The soil is deep and of superior quality. It is admirably adapted for a dairy, or for grazing and grain; has a fine orchard of choice grafted fruit; and for profit, health, and beauty of location, cannot be surpassed. It is fully supplied with farming tools, and about fifty head of cows and young stock, all or any of which may be had with the farm. The New-York and Erie Railroad furnishes ample facilities for forwarding produce to the New-York market at all seasons, and the route of the contemplated Albany and Binghampton railway, passes within a few miles of the farm. The farm can be conveniently divided. Price low—title perfect. Terms most easy.

G. VAN DER LYN,
May 1, 1852—tf. Oxford, N. Y.

Valuable Farm for Sale.

THE subscriber offers for sale four hundred and fifty acres of land, being a part of his homestead. and comprising two hundred acres of as desirable land as any in Addison county—lying on the main road four miles north of Vergennes on the border of Lake Champlain, and one mile from the Railroad Station. It is under good cultivation, and furnished with commodious buildings. The remaining 250 acres is wood land; a portion of it covered with a heavy growth of hemlock and other valuable timber, and the remainder with the best quality of wood for fuel. The property will be sold together or in parcels. Postpaid inquiries promptly responded to.

ROW'D T. ROBINSON,
Aug. 1—tf. Ferrisburgh, Addison co., Vt.

New-York Agricultural Warehouse and Seed Store.

WE have constantly on hand, the most extensive assortment of the best and latest improved Agricultural and Horticultural Implements, and Field and Garden Seeds, ever offered for sale in the United States, embracing every Implement, Machine, or Seed desirable for the Planter, Farmer, or Gardener. Also Guano, Bone Dust, Poudrette, Plaster of Paris, and Super Phosphate of Lime. Durham, and other improved breeds of Cattle and Sheep.

A. B. ALLEN & CO.
Nov. 1, 1852—tf. 189 and 191 Water St., New-York.

Superphosphate of Lime.

THE GENUINE ARTICLE, manufactured by Professor Mapes, also C. Deburg's No. 1—with printed directions for their use, in bags of 150 pounds each. Farmers and Gardeners will do well to apply to us, as we keep none but the *genuine unadulterated* article.

A. B. ALLEN & CO., 189 and 191,
Water-st., New-York
Oct. 1—tf.

THE CULTIVATOR
Is published on the first of each month, at Albany, N. Y., by
LUTHER TUCKER, PROPRIETOR.
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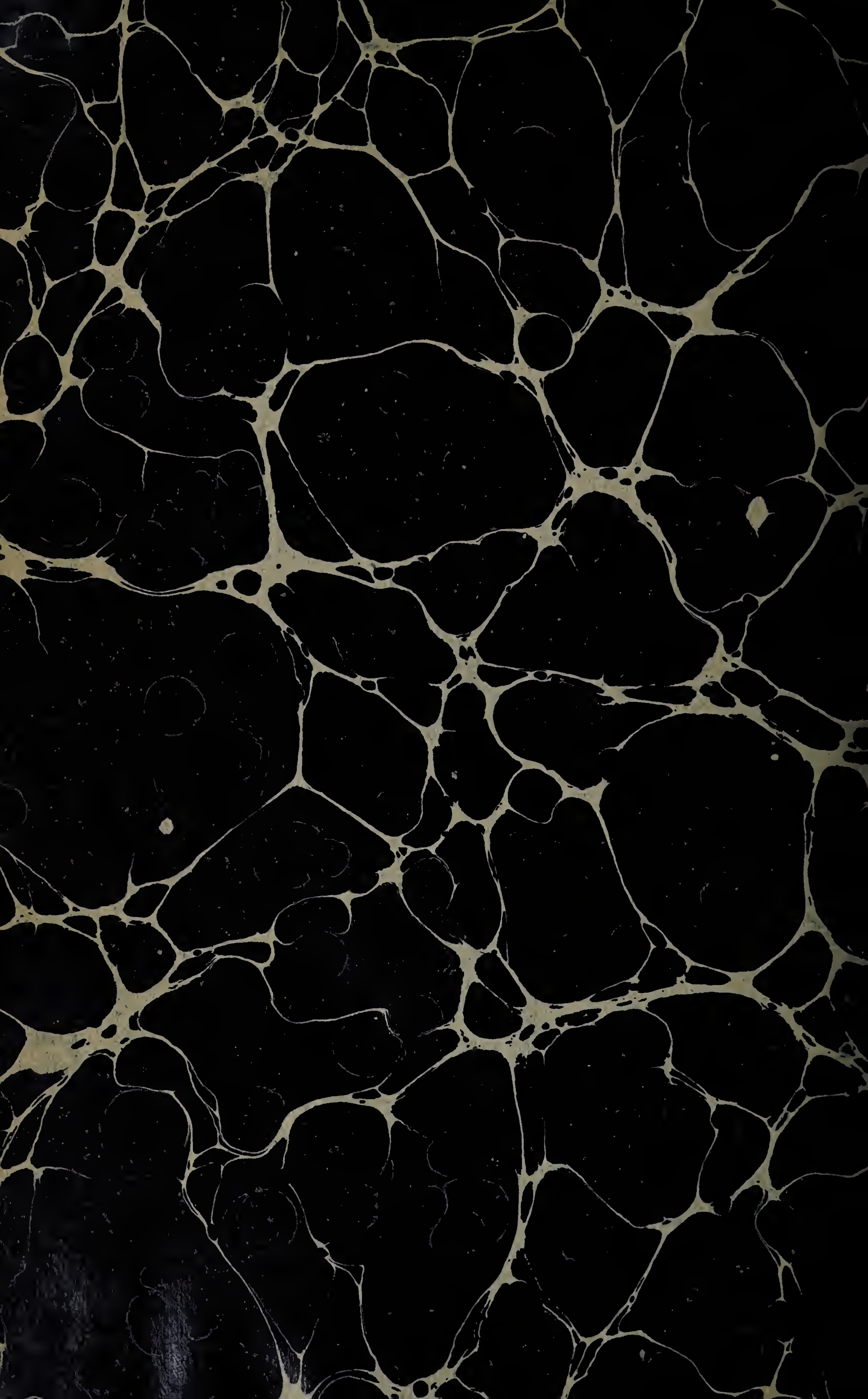

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